PUNJAB ADMINISTRATION REPORT

1915-1916

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1915-16.

Agents for the sale of Punjab Government Publications.

REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1915-16.

Lahore:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB.
1917.

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PART I.

GENERAL SUMMARY.

(The "year" throughout this report is not invariably the financial year ending 31st March 1916. At the heading of each chapter, with the exception of chapter I, a reference is given to the departmental reports which contain details of the subjects dealt with. The "year" of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the "year" in chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March 1916, in chapter II it is the revenue year ending 30th September 1915, and in chapters III and VI it is the calendar year ending 31st December 1915.

The Administration Report for 1911-12 was a decennial report, and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.)

CHANGES IN THE ADMINISTRATION.

1. Sir Michael O'Dwyer, K.C.S.I., held charge of the office of Lieutenant-Governor of the Punjab throughout the year under report. **Personnel.**

2. The decided success of the arrangements for the systematic inspection of the judicial courts referred to in the last report justified the reappointment of a third temporary Additional Judge for the cold weather of 1915-16. The Government of India sanctioned in August 1915 the retention of the Additional Secretary to Government for a further period of one year. **General.**

3. In the loyalty and patriotism which India displayed during the year in the Great War the Punjab can fairly claim a full share. In normal times it supplies over half the strength of the combatant Indian Army, though its population is only one-twelfth that of British India. And in response to the special appeal for recruits for the War, the same proportion was maintained, the Province furnishing 70,000 out of the 127,000 raised within the Indian Empire by the middle of April 1916. The enthusiasm for recruiting was general, many of the leading men **The Punjab and the War.**

taking an active part in encouraging it. All the fighting races, whether in British districts or in the Native States, came forward nobly, and even classes which for generations had given up military service successfully pressed their claim to take part in the defence of the Empire. How well those who went to the front played their part was made clear by the august message of His Imperial Majesty to the Indian troops when leaving France for other theatres of War, from the despatches of the various Commanders in the field testifying to the gallantry and perseverance shown by Punjabi regiments, from the many Military decorations bestowed not only by the British Government but by our French and Russian allies on Indian officers and men for acts of signal bravery, and, finally, from the number of war-worn, wounded or invalided veterans whom the Province welcomed back to their hearths and homes. The proud distinction of being the first Indian to win the Victoria Cross belongs to Naik Khuda Dad Khan of the 129th Baluchis, a resident of Jhelum, and of 9,215 death casualties in the Indian Army (excluding Gurkhas from Nepál) up to 31st March 1916, 5,183 fill to the share of the Punjab.

4. While the spirit of the troops won universal approval, the spirit at home of the people of the Punjab was no less remarkable. Generous gifts were made to the war relief and other funds to procure comforts for the troops in the field, to assist the wounded and invalided while in hospital and to give them a good start on their return to their homes. And, last but not least, the Ruling Chiefs and people of the Province supplied to the Army at the front a fleet of 43 fighting aeroplanes costing nearly 15 *lakhs* of rupees—a generous and practical gift which received august recognition in a message from His Majesty the King Emperor.

5. In 1915 the political situation was regarded as alarming by many people outside the Province. But those who knew the Punjab and the people, while they felt the anxiety which is natural when passing through critical times, saw no cause for alarm. They realised that the disorders caused by the returned revolutionaries and their adherents in the Central Punjab and by bands of ignorant and misguided dacoits in the South-West Punjab were but passing and sporadic manifestations with which the vast majority of the people had no sympathy or concern. They were therefore confident that those disorders would soon be repressed by the united efforts of the administration and the people, and the results of the year show that their hopes were realised more fully and speedily than any one who did not understand the temper and spirit of the people of the Province would have anticipated. The great majority of those who were actually associated with the anarchist movement were brought to justice and met their deserts. A special tribunal constituted under the Defence of India Act, 1915, was employed for nearly a year in dealing with the two great cases known as the Lahore Conspiracy Cases. The procedure prescribed by the Act is framed with the object of securing the speedy administration of justice under very special conditions. Details of the results achieved by the tribunal are given in Part II, and, though at the conclusion of the trials a few of the leaders in the revolutionary conspiracy were still fugitives from justice, their

influence was gone and a dangerous movement had been killed. Apart from those directly implicated in the revolutionary movement, who were dealt with by the courts, a considerable number of returned emigrants suspected of complicity were dealt with under the Ingress Ordinance, but, by the middle of April, 117 who appeared likely to settle down were released conditionally and only 134 remained interned.

6. In November 1915 Sir Michael O'Dwyer personally visited the South-West Punjab, the serious disturbances in which quarter were described in last year's report, and, after hearing statements of their case from the leading representatives of the Hindu and Muhammadan communities, initiated measures as the result of which the Deputy Commissioners of the districts concerned were able to report by the end of the year that all claims on account of lossess ustained in the dacoities had been adjusted and that there appeared to be no likelihood of the recurrence of disorder. A strong body of punitive police was quartered in the affected areas at the cost of those sections of the population who took part in the dacoities, the term of this punitive levy being made dependent on the conduct of the inhabitants, and, in addition, an effective system of watch and ward (*thikri pahra*) was introduced. It may be remarked here that, owing to the steady improvement in the relations between Hindus and Muhammadans, the punitive police force was removed in October 1916.

7. In spite of the special difficulties created by the war, high prices, bad harvests, and other abnormal conditions, the public peace of the province as a whole was well maintained. Murders and riots showed a satisfactory decrease, especially in the north-west of the province. Crimes against property showed an increase on the previous year, especially in the Central districts where organized gangs were at work, but many of them fell into the hands of the police and their removal and the easier prices of food-grains are likely to lead to an improvement. The figures for dacoities continued to give some cause for uneasiness, criminals who formerly operated singly or in small bodies appearing to have learned the value of co-operation. While the administration was not found wanting, reassuring features in connection with these dacoities were the many instances of prompt action on the part of the villagers which led to the capture of several gangs on the scenes of their offences. Government did all in their power to give heart and encouragement to the people. Licenses for arms were freely issued in the disturbed districts, remissions of land revenue amounting to over Rs. 10,000 were granted to 13 villages in various parts of the province, nearly 4,000 acres of land were allotted in the canal colonies to 122 individuals from ten different districts who had shown exceptional pluck and rendered special services to the criminal administration, while money rewards to the value of over Rs. 29,000 were distributed to several hundred persons. Special pensions were also sanctioned for the dependents of those who, whether Government servants or not, have lost their lives in the cause of law and order.

8. The internal administration, though subjected within the last few years to a severe strain, has nowhere shown any signs of breaking

down. In spite of the abnormal conditions, the departments of Government carried on their work steadily and effectively. Many of them, such as the Commission, the Public Works Department, and the Police, surrendered some of their best officers for military service in the field or in the recruiting branches of the army, and two young officers of the Punjab Commission had already at the close of the year died a soldier's death, one in France and the other in Mesopotamia.

RELATIONS WITH TRIBUTARY STATES.

9. The splendid services of the Punjab States in connection with the war have been already noticed. The Maharaja of Patiála suffered a treble bereavement during the year by the deaths of his infant son, the "Kolgarh" Maharani, and his uncle, the loyal, and well-beloved Raja Sir Ranbir Singh, K.C.S.I. In Baháwalpur the year was marked by administrative progress in many useful directions under the Council of Regency. The young Nawab had an attack of enteric fever while at Murree, but made a satisfactory recovery. A second son was born to the Raja of Farídkot and the new scheme of State administration worked well. In Kapúrthala the conduct of the business of the State, during the Maharaja's absence in Europe and America, was quite satisfactory. Raja Bije Sen of Keonthal died, and Government recognised the succession of his heir Tikka Hamendar Sen, a boy of 13, who is being educated at the Chiefs' College. Tikka Vidyadhar Singh was formally installed as Chief of Kumhársain, and his infant heir died.

FRONTIER AFFAIRS.

10. A long standing dispute between the Mazari and Drishak tribes about some land on their border was decided by *jirga*, and a feud between sections of the Gurchani and Bugti tribes happily settled. Two serious dacoities, the work of gangs from outside the Punjab, occurred, one of which inflicted some loss upon the Baloch Levy who followed it up; at the end of the year they were under investigation in the North-West Frontier Province. Nawab Jallab Khan, C.I.E., Chief of the Gurchani *Tuman*, died in October, and his son, Sardar Lashkar Khan, was formally installed in his stead in November 1915. Sardar Fakir Khan, Bozdar, was released from imprisonment in February 1916 by the Lieutenant-Governor in response to a plea for mercy submitted by the *Tumandars*, on conditions subjecting him to strict surveillance by the Commissioner of the Multán Division.

CONDITION OF THE PEOPLE.

11. The prosperity of the agricultural population was not on the whole seriously shaken from any cause, the war not excepted. The level of wages was maintained and there was no lack of employment. In a few districts labour was scarce owing to heavy enlistment for the army and occasional complaints were heard of the high rates demanded by agricultural labourers. The loss suffered by cultivators in the previous year owing to the slump in cotton prices was to some extent made good by a general rise in prices in the year under report. Mortality from

plague was higher than in any year since 1907 and nearly a quarter of a million deaths were due to this cause. There was also a severe epidemic of cholera, and, though malaria in an epidemic form was almost entirely absent, the death-rate rose from 32 to 36·3 *per mille*. The birth-rate of 43·6 *per mille* was rather lower than the average of the previous five years.

ADMINISTRATION OF THE LAND.

12. Reassessments in four districts and deferred enhancements in three others resulted in an increase in the fixed demand by nearly Rs. 5 *lakhs* to Rs. 217 *lakhs*. Rs. 215 *lakhs* were put down for collection, of which 99 per cent. was collected. Suspensions amounted to only about Rs. 1½ *lakhs*, as compared with an annual average of Rs. 5 *lakhs*, while over Rs. 7½ *lakhs* were collected on account of previous years and the total amount outstanding at the close of the year was less than Rs. 4 *lakhs*, a level only reached once in the last ten years. The fluctuating land revenue demand rose by over Rs. 10 *lakhs* to Rs. 128 *lakhs*, mainly owing to the extension of irrigation from the Upper Chenab and Lower Bari Doab Canals. In spite of increased receipts from the sale of waste-lands and town sites in the Lower Bari Doab Colony, recoveries under the head "Other Land Revenue" fell by about Rs. 7 *lakhs* to Rs. 42 *lakhs* owing to the natural decrease in the amounts to be realised by sale of proprietary rights in the older colonies. **Land revenue.**

There was a large increase in the number of coercive processes issued, mainly due to the efforts of Collectors in the Multan Division to remedy the unpunctuality of revenue-payers, though the foolish rumours which prevailed in this part of the province at the outbreak of the war were also partly responsible by causing a contraction of the accommodation which revenue-payers usually receive from the village bankers.

13. Record work was completed in two settlements and reached the final stages in four other districts. The experiment of utilising canal patwaris for revenue record work is in progress in two districts and promises to have beneficial results for the cultivators. Progress with mutation work was not wholly satisfactory, and the employment of kanungos to attest undisputed cases of inheritance has been shown to afford little relief. The conduct and efficiency of patwaris was satisfactory, but there was a falling off both in the number and quality of candidates which give some cause for apprehension and points to the necessity of making the pay and prospects of this class of Government servant more attractive. **Land Records.**

14. Settlement operations were in progress in the districts at the beginning of the year and were started in one district during the year. In two districts operations were concluded and satisfactory progress was made elsewhere and by the end of the year assessment reports remained due from only three districts, and measurements and record work were uncompleted in only four districts. Traverses for field surveys in parts of the Sutlej and Chenab riverains were carried out by the Survey Department, and survey operations under the settlement staff were also in progress in Kángra and Simla. Satisfactory progress was made **Settlements.**

with the determination of the inter-provincial boundary of the United Provinces and the Punjab on the Jumna. A permanent boundary was secured by agreement of the estates concerned for half the line, while for the remainder the Punjab Government has agreed that power should be taken by legislation compulsorily to determine a fixed boundary of estates, and the United Provinces Government has the question under consideration.

Canal colonies.

15. In the three old colonies of the Lower Chenab, Lower Jhelum and Chunian, the process of allotment is complete, and they have reached a stage of development which places them on a level with the ordinary districts of the Province. The year was a prosperous one, prices for food-grains and fodder ruling high and the value of land rising. Numbers of the original colonists have adopted an easy but shortsighted means of getting rich quickly, taking their newly acquired proprietary rights and pocketing the enormous excess of the present price for land over the nominal figure at which Government allowed them to buy—an excess which amounts in Lyallpur to over Rs. 200 per acre. The system of service grants worked with increased smoothness.

In the new colonies of the Lower Bari Doab and Upper Chenab Canals considerable progress was made in spite of great initial difficulties, about one-third in the former and about half on the latter canal of the allottable area being allotted. The prices realised for land sold by public auction fell considerably below those obtained on the Lower Bari Doab Canal in the previous year, but, considering the condition of the money market, the large extent to which the demand for land has been met by previous auction purchasers and the competition of colonists in the older colonies, who are willing to sell their holdings, they were not unsatisfactory. In pursuance of the policy of large grants for stock raising purposes which is a special feature of this colony eight regimental horse farms and three cattle farms were allotted on the Lower Bari Doab. 126,500 acres in peasant grants were allotted, shortness of canal supplies in a season of unusual drought and a groundless panic among the colonists as to the nature of their conditions notwithstanding. The cultivated area has risen from 35,000 to 138,000 acres, progress has been made in communications and a start made with arboriculture. Plans were completed in conformity with the recommendations of the Town-Planning Committee for the extension of the towns of Montgomery and Okara, at both of which large number of sites were sold, and for the creation of new towns at Khanewal and Chichawatni. The Upper Chenab Colony labours under certain disadvantages, a stiff soil, the fact that much of it will only receive *kharif* irrigation, and a mixture of classes among grantees, *viz.*, disappointed applicants for land in the Jhelum Colony and men receiving compensatory grants. Allotment began and 41,340 acres were given out, but no cultivation of the permanently allotted area was attempted owing to the delay in completing the Upper Jhelum Canal.

Wards estates.

16. Two estates and a portion of a third were released and two were taken under the superintendence of the Court of Wards. The important

Sheikhupura estate, which is the one partially released, is a signal instance of the protection extended to families of note by Government; debts amounting to Rs. $6\frac{1}{2}$ *lakhs* when the estate was taken over 16 years ago have been paid off, and the assets increased by Rs. $2\frac{1}{2}$ *lakhs*, while the cultivated area has been increased by 70 per cent. Nearly 6 *lakhs* of rupees were invested in land in the Lower Bari Doab Colony: the close connection thus established between the Court of Wards and the new Colony cannot fail to have a beneficial effect. In the Mamdot Estate a Central Co-operative Credit Society was established to finance village societies among the Nawab's tenants. The amount spent on permanent improvements showed a satisfactory increase.

Revenue and rent-paying classes.

17. The agricultural prosperity of the Province appears in the figures for alienations and the price of land. Not only the proportion but the actual area of cultivated land under mortgage is now less than in any year since 1901-02. The ascertained all-round average price for ordinary cultivated land is now Rs. 180 per acre, the sale value representing 134 years' purchase of the land revenue, as against 66 years' purchase in 1896-97. Ten years ago the selling price was Rs. 86 per acre. This extraordinary appreciation in value has taken place since the passing of the Alienation of Land Act, though doubtless the general recognition of the lightness of the Provincial standard of assessment is a contributing cause. The statistics for transfers show that evasion of the Act is generally either impracticable or unprofitable. Agricultural tribes were on the whole the gainers by the alienations reported during the year.

There was little demand for loans for land improvement, a result produced by easy credit in a year of high prices and by the opportunities offered in many districts to agriculturists by co-operative credit societies.

The relations between landlords and tenants continued cordial.

LEGISLATIVE COUNCIL.

Legislation.

18. There were nine changes during the year among nominated members of the Legislative Council. The number of meetings held was four. Out of the three Bills introduced, one (The Punjab Military Transport Act, 1916) received the assent of His Excellency the Viceroy and became Punjab Act I of 1916, the second (The Punjab Medical Registration Act, 1916) was passed in April and received the assent in May 1916, and the third (The Juvenile Smoking Act, 1916) remained pending. A resolution recommending an extension of the system of village patrols (*thikri pahra*) was carried and passed; one resolution was lost and three were withdrawn. One hundred and forty-three questions were put and answered. Twelve Acts of the Imperial Council more particularly affecting the Punjab were passed.

PROTECTION.

Police.

19. The year 1915 will stand out prominent in the annals of Criminal Administration in the Punjab. The outrages of the *Ghadr*

revolutionaries, the dacoities of the Jhang, Muzaffargarh and Multan Districts and the less obtrusive, but numerically important, activities of immigrant and resident members of criminal tribes imposed a strain of the severest kind on the skill, devotion and loyalty of the Police Force, from which it emerged with the greatest credit. On the whole, the response made by the people to the call for co-operation with Government for the preservation of peace and order was effective, and spirited assistance in the suppression of the *Ghadr* movement was rendered by the more important men of the Central Punjab, like the brave but ill-fated Sardar Bahadur Achhar Singh of Amritsar, and by single communities, as exemplified in the effective resistance offered by the villagers in the Chabba dacoity. Cases, however, were not wanting in the dacoities of the South-West Punjab where either deliberate connivance or indifference and neglect of duty by the leaders of the people resulted in deplorable crimes which brought ruin and misery on hundreds of homes.

The anarchist movement culminated in the now historic cases known as the Lahore Conspiracy and Supplementary Conspiracy cases. The plans of the revolutionaries embraced the commission of dacoities and looting of Government treasuries with the object of amassing funds, the manufacture of bombs, the collection of arms, and the seduction of troops and students—all measures subsidiary to the waging of war against Government. The head-quarters of the conspiracy was established in the Manjha, Malwa and Doaba tracts, but recruits were drawn to the ranks of the terrorists from districts as far afield as Rawalpindi and Jhelum and from other Provinces. At the end of January and the beginning of February the police were confronted with a serious and concerted outbreak of dacoities and murders perpetrated on inoffensive villagers in the Ludhiana and Amritsar Districts and the Maler Kotla State as a prelude to the capital design of the conspirators, which was to raise mutinies among the troops of the garrisons at Lahore, Ferozepore and other cantonments. The plans of the anarchists were, however, completely frustrated and the conspiracy rapidly collapsed, although a series of sporadic outrages followed. Nearly all the principal organisers and most active agents of the movement were brought to justice and only a few desperate men remained at large at the end of the year.

The dacoities and disorder that occurred in the Jhang, Muzaffargarh and Multan Districts in February and March were unprecedented in the annals of the criminal administration of the Province. The causes of this sudden outburst of lawlessness are varied and to some extent obscure: but while in some places the disturbances are attributable to economic causes such as strained relations between Muhammadan debtors and Hindu creditors, to local distress caused by high prices, and to the refusal of credit by grain-dealers or money-lenders, elsewhere there were unmistakeable signs that the disorder was the result of a fairly widespread belief that British rule was shaken and the time was ripe for the Muhammadan peasantry to release themselves from all obligations to their Hindu creditors and to start afresh with a clean sheet and with such loot as they could secure by the spoliation of their well-to-do neighbours. The local authorities at first failed to realize the significance

of this unexpected outbreak: and were also handicapped by the absence of the police reserves in other parts of the Province, with the result that 128 crimes of violence were committed before the disturbances were quelled. Since the outrages were usually committed at night and often whole villages participated in them, complete success could not be gained in tracking down the offenders: but some 700 convictions were obtained and terms of imprisonment averaging from 5 to 7 years awarded.

A great and sudden increase in offences against property, and especially burglary, which offers much less risk of detection than ordinary theft, was due chiefly to the immigration of criminal tribesmen from down-country into the central districts and also to the activities of the local criminal tribes and other criminal gangs on whom this influx naturally reacted. The first six months of the year were overshadowed by the abnormally high level of prices and an exceptionally severe visitation of plague, and to these succeeded a failure of the monsoon. Many of the criminal gangs were brought to justice and a comprehensive scheme for the settlement of those who are at large was under elaboration by an officer specially deputed for the purpose.

When all the circumstances described above are taken into account, the increase in cognisable cases dealt with by the police from 34,000 to 36,000 round, exclusive of offences under local and special laws, gives no ground for future apprehension. Murders actually declined by 5 per cent., and there was no appreciable rise in the number of thefts; cattle-theft, owing to the continued high price of fodder, was considerably less popular with the criminal classes.

The inefficiency of, and the difficulties in applying, the provisions of the Code of Criminal Procedure for placing habitual offenders on security continued to be the subjects of complaint. It is proposed to deal with the defects of the present system by special legislation.

The Criminal Intelligence Department achieved eminent success in a year of exceptional stress and strain. The enquiry into the distribution of the Police of the Province mentioned in last report was successfully concluded and resulted in a saving of about 3 lakhs in existing and contemplated recurring charges.

There was a further substantial decline in the work of the Chemical Examiner during the year.

Criminal Justice.

20. Various circumstances, already noticed in the paragraphs on Police Administration, conspired to stimulate the disorderly elements of the community to crime. The resulting increase of 2 per cent. in real reported offences, though the figure does not take account of the more violent form of the resultant lawlessness, such as the *Ghadr* Conspiracy and the dacoities of the South-West Punjab, which were not dealt with by the ordinary Courts, is therefore not surprising.

The heinous political offences just referred to were tried by two Special Tribunals, each consisting of three members including two

Sessions Judges, constituted under the Defence of India Act, one sitting at Lahore and the other at Multan. The Lahore Tribunal in 1915 dealt with the first Lahore Conspiracy Case and its many ramifications, all of which were offshoots of the revolutionary movement inspired by returned emigrants, and that at Multan with some of the most serious of the organised dacoities perpetrated in the south-west Punjab in 1915.

There was a decline from 489 to 456 in murder cases and a marked falling off in cases of attempts at murder, culpable homicide, and in serious offences against the person generally; on the other hand, most classes of serious offences against property show a substantial increase. True cases of robbery and dacoity rose from 474 to 702, but the increase was practically confined to the Jhang and Muzaffargarh Districts and to three central districts, Lahore, Gurdaspur and Jullundur, where the activities of the *Ghadr* party were specially marked. Burglaries, thefts and cases of receiving stolen property were all considerably higher than in 1914, a result to be expected in a year of severe agricultural depression, and, but for the employment in several districts of the indigenous patrol system, it is probable that a much larger number of offences against property would have been committed. Offences relating to marriage continued to decline steadily, though slowly, doubtless as the result of the registration system which in some form or other is now to be found in many districts in the Province.

Faced though it was by special difficulties, the Magistracy, like the Police, coped successfully with its work. The percentage of death sentences confirmed was never so high, and the fact that during the last few years there has been less reluctance than formerly to impose the extreme penalty on convicted murderers, has had a marked deterrent effect. The percentage of convictions to cases brought to trial also shows a progressive improvement in recent years and District Magistrates disposed of an increased number of serious cases under section 30 of the Code of Criminal Procedure.

21. The year was for the Jail Department one of even greater strain than its predecessor. The number of prisoners admitted into jails rose by more than 10,000 and the average daily population by nearly 2,000. Admissions exceeded 50,000 including several hundred men—many of them dangerous and desperate—connected with the revolutionary movement. The daily population was nearly 17,000 and nearly all the most experienced Superintendents had been recalled to military duty. The standard of administration and discipline was, notwithstanding, not seriously impaired. There was a slight rise in the number of escapes but the number of jail offences fell, and the present figure is considerably less than half the number recorded seven years ago. The average number of prisoners throughout the year was nearly 2,000 in excess of the number for which the jails are designed, but the situation difficulty was met temporarily by confining prisoners at night in workshops and tents. The number of hospital cases rose, and this was due mainly to the unhealthiness of the summer but also partly in the case of two jails to overcrowding. There was, however, a most satisfactory

decline in the death-rate, owing mainly to recent measures for the segregation of tubercular prisoners in a special jail at Shahpur. The small proportion of prisoners sentenced to transportation who were sent to the Andamans has, in view of the risk of contamination of the ordinary jail population by so many hardened and dangerous criminals, been referred to the Government of India. The increasing number sent to the Borstal Jail reveals the need for increased co-operation with Government on the part of philanthropic bodies and individuals in a system which is so full of possibilities for the reform of the juvenile offender.

22. The great war, which has affected to a greater or less extent nearly every branch of the administration, appeared to have had but little disturbing influence on the Punjabi civil litigant, the number of suits instituted during the year being higher than that of 1914 and enormously above the average of the last 12 years. **Civil Justice.**

The rise in the number of suits was entirely confined to the simplest class of suits, those for the recovery of money or moveable property, suits of greater value and complexity declining substantially. On the whole it may be said that the general uneasiness and contraction of credit caused by the war—as shown in another form by the large withdrawal of savings banks deposits—aggravated by the recent bank failures stimulated creditors to endeavour to realise their outstandings and that the tendency was encouraged or discouraged according as local economic conditions were favourable or unfavourable. The actual burden of work was probably lighter than in 1914. The average duration, however, was 78 days for contested and 39 for uncontested, original suits, as compared with 74 and 37 days, respectively, in 1914, while the average duration of civil appeals rose from 141 to 164 days. The Chief Court, despite a progressive increase in the amount of their civil work in recent years, shows a continuous increase in the number of disposals and the reduction of their pending file. The results of the year as a whole were not very favourable to the decree-holder seeking execution of his decree; the number both of applications and of pending files rose and the percentage of realisations to claims was not more than 26.

Work under the Provincial Insolvency Act continued to increase and the statistics of its working compared unfavourably with those for 1914. The law, as it stands, is admittedly unsatisfactory, and the Punjab Government have, in continuation of previous proposals for the general amendment of the Act, submitted to the Government of India certain specific recommenations with the object of enabling the courts to dismiss summarily an insolvency petition presented by an agriculturist debtor when it is apparent that he could, if he chose, satisfy his creditors' claims.

The amendment and simplification of rules framed under the Guardians and Wards Acts by the Chief Court appreciably lightened during the year the work of the courts in administering minors' estates.

23. Registration business received a check in 1915 after a period of progressive expansion. The reason generally ascribed is the adverse influence of the war, but the contraction in operations appears to **Registration.**

have put the clock back no farther than 1913 and is significant of the slight impression made on the ordinary lives of the people by the European catastrophe. The number of compulsory registrations fell by 1 per cent. in sympathy with the decline in sales and mortgages and the value of the property involved declined by over 11 per cent. Transactions affecting immoveable property optionally registered rose in value by no less than 63 per cent. owing to the registration of a few high awards in three districts. Income slightly fell and expenditure, owing mainly to increased salaries and the cost of additional establishment sanctioned towards the end of 1914, slightly rose. The net profits on the operations of the Department declined somewhat from those of the previous year.

LOCAL SELF-GOVERNMENT.

District Boards.

24. As in the previous year, elections failed to evoke much interest, only 19 out of 133 vacancies being contested. The fact must be faced that the rural population have been slow to appreciate and assimilate the election system, which is still foreign to their ideas and traditions. The result is that once a member has secured a seat by election, which in practice means either by popular acclamation or by acquiescence, he is in nine cases out of ten, if he so desires, re-elected without opposition on the expiry of his term. The revision of the financial relations between Government and district boards, which is now in progress and has actually been introduced in the Rawalpindi Division, provides a suitable opportunity for a thorough review by boards of their affairs with a view to an intelligent distribution of their resources among the many objects for which provision has to be made. Government grants are being calculated on a sufficiently generous scale, but the time appears not far distant when local taxation must supply a larger proportion of the resources of the boards and some have already taken action to meet this contingency by increasing the local rate, which is at present extraordinarily low as compared with the local rates of other civilised countries.

Gross income, though double what it was on the average of the early years of the century, fell while expenditure rose.

Education, which receives from fees in secondary schools a proportion to total expenditure which compares very favourably with that in other provinces, was amply provided for. Medical objects in certain districts hardly received the attention they deserved. Steady advance was made in the spheres of improvement of agriculture and of the breeding of horses, cattle, and sheep, and the people show a growing appreciation of the services of the Civil Veterinary Department.

A tax for the promotion of sanitary improvement is now in force in individual villages in several districts. A Bill has been drafted and circulated for opinion which is intended to provide a simple machinery of self-government suitable to small towns and the larger villages, but for smaller villages Government has decided that the imposition of taxation and the passing of simple regulations under the District Boards Act will

meet existing requirements. At present only a few districts have shown any inclination to adopt such regulations, and the Sanitary Board has intimated to them that it is prepared to assist in financing suitable schemes of sanitation, provided that a portion of the cost is forthcoming from local sources.

25. An enquiry made during the year in the case of 29 out of the 100 municipalities where the elective system has not yet been introduced showed no very general desire for change; a further significant commentary on the popularity of the system as applied to self-government is supplied by the facts that the percentage of vacancies contested declined from 46 to 30·5 and that the great majority of the committees which possess the power of choosing their own President still either elect a President from among the *ex-officio* members or apply to have one appointed (out of the committee) by Government or the Commissioner. Undesirable practices were unfortunately not uncommon, and with a view to eliminating or reducing them Government is engaged in the preparation of a revised set of rules for the registration of voters and the conduct of elections. Municipalities.

The working of the committees, while on the whole satisfactory in the matters both of the number of meetings held and of the attendance of members, incurred some frank criticism from Government, the object of which was not to discredit municipal work but to emphasise certain defects which retard the development and efficiency of urban self-government in the Province.

Income declined mainly owing to a falling-off in the amount of loans and grants from Government, and this was accompanied by a reduction in expenditure. Receipts from direct taxation show an enormous disproportion to income from octroi, which is larger than ever; the necessity for more enlightened views was pressed upon the notice of the committees. The substitution of a terminal tax for octroi is slowly but surely gaining ground.

In the matter of education most committees are fairly discharging their liabilities. In the improvement of urban sanitation, there has, on the whole, been steady progress, but the percentage of their income devoted by municipalities to medical relief is still inadequate.

AGRICULTURE, WEATHER AND CROPS.

26. A third Assistant Director of Agriculture was sanctioned during the year, and the appointment of an Entomologist was agreed to by the Secretary of State though the post is not to be filled until financial conditions improve. Additions to personnel of the Department.

For the Lyallpur college the year was one of marked success. There was a stronger demand for admission both to the English and vernacular classes and a keener interest in the college was evinced by the public. The vernacular class is becoming specially popular with zamindars. A demand from private landowners, all Europeans, for three diplomatees of the College as managers of their The Lyallpur College

estates was a gratifying proof of the useful work done by the institution. It was decided that two appointments of *Zilladar* in the Irrigation Branch of the Public Works Department should be allotted annually to graduates of the college. A proposal to affiliate the college to the Punjab University is under consideration.

Work of the Department.

The year saw the successful issue of the experiments of the Agricultural Chemist in the reclamation, given steam tackle and ample irrigation facilities, of saline lands, and it has been established that the value of such lands can be enhanced by about 600 per cent. at an outside cost of about Rs. 50 per acre. The work of the Economic Botanist in separating and selecting different types of wheat and cotton continued on the lines which have been so successful in the past: in addition the isolation of types of barley and gram has been commenced. The practical value of these experiments and the success of the Department in popularizing their results were amply demonstrated by the large increase in the areas sown with the varieties of wheat and of American cotton which have been proved most suitable for the province. The attention of the Agricultural Engineer was devoted chiefly to well-boring operations, but he also did useful work in designing improved agricultural implements of a simple and inexpensive type to take the place of the primitive tools in ordinary use.

Veterinary and Livestock.

27. Though the subordinate establishment of the Civil Veterinary Department was 25 per cent. below its sanctioned strength, the record of work accomplished was highly satisfactory. Nearly 13,000 villages were visited and over 128,000 animals were treated by the touring members of the staff, while the number of animals treated at dispensaries was more than double that of any other province in India. The success which is being achieved by the Department in overcoming popular prejudice is proved by the large increase in the number of castrations and of inoculations and vaccination against rinderpest and other diseases performed during the year. Lectures and demonstrations in villages were carried on as before with marked benefit to the people. The management of breeding herds on scientific lines was started on four farms allotted for the purpose in the Lower Bari Doab Colony. The Government Cattle Farm at Hissar suffered from a shortage of fodder due to the failure of the monsoon, but nevertheless issued a record number of bulls to district boards. A most successful campaign against *surra* constituted only one phase of the useful activities of the Camel Specialist.

The new buildings of the Punjab Veterinary College were opened in December 1915 by the Viceroy and the results are apparent both in the improvement in the training of the students of whom more than half, an unusually large proportion, belonged to the Punjab, and in the increased number of in-patients treated. A post-graduate course, which has been made compulsory for Veterinary Assistants before promotion to the rank of Inspector, was started during the year.

Fisheries.

28. Progress was made with an uniform system of protection for the spawning grounds of the Upper Beas by the application of the

law to the Mandi and Suket States, the Kangra district, and a portion of the Hoshiarpur District. Fishery conditions were investigated in Hoshiarpur, Jullundur and Amritsar. Trout fishing in Kulu was thrown open to the public. Measures for conserving the fresh water fish supply continued to receive attention.

Co-operative Credit Societies

29. Co-operative credit had to contend with three serious difficulties, *viz.*, the dislocation caused by the war, the banking crisis and two successive bad harvests. In the circumstances some set-back might have been anticipated, but the societies again on the whole stood the strain with remarkable success and their sphere of usefulness to the agricultural community was naturally extended by the unfavourable character of the seasons. The year was one of consolidation rather than of expansion and societies were registered in only one new district.

The working capital of agricultural societies now amounts to nearly one million sterling. The paid-up share capital increased during the year by nearly Rs. 5 *lakhs* and the reserve fund by about Rs. 12·3 *lakhs*, giving a net increase in the working capital of Rs. 11·6 *lakhs*, after allowing for a decline of Rs. 6½ *lakhs* in the amount of deposits. The gradual but steady decrease in the rate of interest on loans, the increased proportion of the working capital owned by members, and the ever-growing assistance rendered by societies to their members which is evidenced by the increase in the amount of loans due, all point to the conclusion that the societies are duly fulfilling the objects for which they were created. Eminently satisfactory is the position of a number of societies which in the tenth year of their existence have become practically independent of outside assistance, the accumulated profits having been divided, one-fourth going to the reserve and the remainder to the members in the form of non-returnable shares; the new share capital is sufficient for the members' needs and the reserve is being deposited outside the movement.

The share capital and reserve fund of Central Banks rose from about Rs. 7½ *lakhs* to over Rs. 10½ *lakhs*, a sum which represents nearly one-third of their liabilities and affords strong evidence of their stability. The fluid resources of these banks on the other hand, though they cannot be estimated with certainty, certainly did not exceed Rs. 6 *lakhs* at the beginning of the year while repayments of loans and deposits amounted to about Rs. 27 *lakhs*, and though they were able to meet all calls made upon them during the year without difficulty, the margin of safety is not sufficiently large and the question of fluid resources must receive the closest attention. The concession recently extended to the Punjab of refunding 75 per cent. of the money order commission on remittances between the societies and their financing agencies will make fluid resources more readily accessible at time of need and a scheme to enable Central Banks to utilise each other's surplus balances, which is under consideration, should, if it materialises, assist towards the same end.

Government fully recognises that the rapid expansion of the movement for which the province now appears ripe must, if it is to

proceed on sound lines, be preceded by a substantial addition to the supervising staff. The Registrar was given the assistance of two gazetted officers during part of the year and comprehensive proposals for increasing the number of Inspectors are under consideration.

Rainfall.

30. The total rainfall for the year was far below normal. Autumn sowings in unirrigated areas were much restricted by absence of rain in April, May and June. The total monsoon rain was so much as 41 per cent. below the average in the province as a whole, the Multan Division escaping even the improved conditions of the latter half of September. The total winter rainfall was in even greater defect and was insufficient for the maturing of the "dry" crop, which suffered everywhere especially in the south-eastern and south-western districts.

Crops and Prices.

31. The autumn harvest was short in respect both of sown and matured areas; in the spring harvest the sown area was slightly above normal, but the defective winter rainfall caused great losses, and 24 per cent. of the sowings failed. The prices of wheat and rape-seed fell owing to the poverty of the spring harvest, the diminished foreign demand and the shortage of freight. Cotton and sugarcane on the other hand appreciated in value, the former owing to the combination of a short crop with a revived foreign demand and the latter owing to the diminution of overseas supplies of sugar for the Indian market.

FORESTS.

Forest Department.

32. There was a net decrease of about 441 square miles in the area under the control of the Forest Department, due mainly to the surrender of waste land in the Montgomery District for colonization purposes. The area of protected forests increased by about 200 square miles owing to the notification as such of certain *jagir* forests in Kangra. Government has agreed to surrender its rights in the trees growing in detached plots in Kangra when forest conservancy would be both unpopular and unprofitable. An increase in fees levied on nomadic flocks of sheep and goats has had the desired effect of reducing very largely the number of animals brought into that district to graze, while a tax on the sheep and goats of resident land-owners, in certain *tahsils*, has also been imposed in order to protect the people against themselves.

Planting has been started in the new irrigated plantation at Chichawatni and good progress was made at Kot Lakhpat. The failure of the 1915 monsoon was responsible for the want of success in artificial reproduction outside the irrigated areas. A closer co-ordination between the two branches of the Public Works Department and the Forest Department is being aimed at, in order to improve tree planting operations on roadsides and on the banks of canals.

The year was one of severe fodder scarcity, and in the Western Punjab it was found necessary to throw open large forest areas to free grazing to save as many cattle as possible. The value of free grazing is estimated to have exceeded Rs. 20 *lakhs* and though the forests suffered they must have

been instrumental in saving many thousands of cattle. One of the most satisfactory features of the year was the reduction of the areas destroyed by fire in the Rawalpindi and Kángra Divisions.

The outturn of timber amounted to 9½ million cubic feet, more than 3½ million above the figure for the previous year, and there was a corresponding increase of nearly 2 million cubic feet in the outturn of fuel. Gross revenue showed an advance of about Rs. 2½ *lakhs*, while the cash surplus of just less than Rs. 8 *lakhs* is almost a record. The brisk demand for resin and turpentine accounts for a substantial portion of the increase in revenue, and there is good ground for the expectation that, although at present the Punjab is cut off from the European and American supplies, this industry will remain firmly established even after the war. The Indian *chir* (*pinus longifolia*) has been found to be a suitable substitute for the American pine in ordnance factories, and the prospect of a more general use of fir and pine on Indian railways should open up a great future for the hill forests in the province.

TRADE AND MANUFACTURES.

33. Both in Jhelum and Attock Districts prospecting licenses for oil were granted and, in the latter district, about a quarter of million gallons of mineral oil were withdrawn. The general slackness of the cotton trade during the war has resulted in the closing down of several cotton-ginning factories ; this and the exemption from the provisions of the Act of factories employing not more than 50 persons simultaneously on any day has reduced the number of registered factories from 201 to 187. There is no doubt that the lighting, ventilation, and sanitary condition of these factories improve year by year under the closer supervision which is now exercised. Munition work has created a considerable demand for skilled lathe-turners and in engineering workshops generally there is a tendency towards a rise in wages. A satisfactory feature is the decrease in accidents of all kinds, and factory owners are beginning to realise that the protection of the person and health of their operatives from the dangers of machinery and its surroundings is worth a little trouble, expense, and forethought. **Industries.**

34. The Punjab, broadly speaking, is a province that exports raw and imports manufactured materials and that has, if its large imports of treasure averaging 724½ *lakhs* per annum be included, a balance of trade which inclines to be adverse. The triennium 1913—16 shows at work many abnormal factors of a most disturbing nature, ranging from famine in the United Provinces, the scarcity in the South-East Punjab and the Banking crisis, all of the earlier, to the great European War in the latter, half, and yet trade has been remarkably buoyant, both exports and imports, the latest average worth of which is, respectively, 31 and 32 crores round, showing a rise in both bulk and value. The general standard of comfort and the purchasing power of the people have not been affected. Indeed the enormous recruitment of about 100,000 men for the combatant forces and of some tens of thousands of followers has caused a great influx of wealth into many parts of the province, and this is probably one of the causes of the increased imports of treasure to be referred to below. Before the war the great bulk of the trade of the Province went to **Internal trade.**

Karachi, but the war has reduced exports to the Sind port by 19 per cent.; Bombay and Rajputana are the Punjab's next best customers. The seasons were, on the whole, favourable. In the matter of exports, wheat suffered by the shortage of freights, to some extent by the restrictions imposed by Government control, but also by artificial high prices due to the manipulation of the market by local dealers; cotton has lost the German and Austrian market, but the Japanese and Indian demand is steadily growing; a demand for gram and pulses has been stimulated by calls from the Army and the famine in the United Provinces; the oilseeds trade has also suffered by the war; woollen piece-goods have leaped in 7 years owing to the war demand from an export value of two and a half to one of twenty-three and a half *lakhs*. The war temporarily checked foreign imports, but a slight recovery took place in 1915-16 and Indian factories were not slow to take advantage of the opportunity. Many other articles were affected by the war, especially drugs, dyes, sugar and machinery and show diminished totals, but coal and coke, which have been in greater demand owing to Railway extensions in the Province, return largely enhanced figures. The imports of treasure increased rapidly throughout the triennium, though in the latter half gold was to a large extent replaced by silver owing to the stoppage of the issue of sovereigns from the treasuries.

External Trade.

35. The result of the triennium, after making the necessary allowance for a large paper increase in the volume of trade with Central Asia, is a steady expansion of both the external import and export trade only temporarily checked by the war, with a definite turning of the balance in favour of the Punjab. Imports are now worth 43·8 and exports 49·7 *lakhs*.

The figures for exports to Afghanistan show a decrease in weight accompanied by an increase in value, due chiefly to an appreciation amounting to nearly double in the cost of rice. The chief features have been a rise, through the stoppage of European products, of 3½ *lakhs* in Indian piece-goods, and the cessation of the trade in green tea which is attributed to its diversion to the railway route. There was a general decline in all the principal articles of import.

The Central Asian trade, which shows a balance of 14½ lakhs in favour of the Punjab, felt the effects of the closing of the Russian bank at Kashgar. The difficulty of remittances to the Punjab was met partly by the use of raw silk to the value of 5½ *lakhs*, but it directly produced a fall in the export of skins. The raising of the Punjab duty in 1916 sent up *charas* imports by 1,600 *maunds* and an interesting result of the war was the reimportation of 30 *maunds* of paints and colours, the price of which has considerably risen in India. In the case of exports there was a general decline during the past year, but Indian piece-goods and Indian silk profited by the elimination of Germany from the market and the trade in leather manufactured and unmanufactured, unrefined sugar and petroleum remained buoyant and profitable. Indian tea and refined sugar are too dear to retain their popularity.

The balance of trade with Chinese Tibet is still largely against India. The export trade continues to be disappointingly small, but the

improvement of the Hindustan-Tibet Road from Chini to Shipki, which is about to be taken in hand should stimulate it. Among imports salt, which is a medium of barter, fluctuates with the grain trade and borax declined owing to lately developed European competition, but the all-important trade in raw wool is steady. Exports fell under European piece-goods, which were partially replaced by Indian grain, the prices of which ruled high, and under sugar, refined and unrefined, the European supply of which was cut off.

Joint Stock Companies.

36. The purging effect of the Banking crisis of 1913 and of the measures which had to be taken in consequence of it is still visible, the number of registered companies with share capital continuing to decrease and only 77 remaining active during the year, while others are under liquidation or are being struck off. The indigenous companies are rapidly disappearing, leaving as survivors those under British and sound Indian control. The capital invested is diminishing, the sum paid up being nearly 3 *lakhs* of rupees less than last year. Promoters of new concerns show a preference for registration as private companies, which are exempt from the necessity of employing certificated auditors. The local Insurance and Provident Insurance Companies still decline in number. The small indigenous companies continue to disregard generally the provisions of the Indian Companies Act and, where warnings fail, prosecutions have to be instituted.

PUBLIC WORKS.

Public Works Department.

37. In the year under review, financial stringency necessitated considerable reductions in expenditure and, as far as possible, in establishment. The department has contributed its quota towards the war, for out of 43 officers on the Imperial Establishment, the services of 12 have been placed at the disposal of the Military authorities.

In December 1915 the late Viceroy honoured Lahore with a visit and on the 10th of that month formally opened the King Edward Memorial and the Veterinary College. The completion of the former will provide for the province a system of buildings for a hospital and for schools of medicine and original research. In Government House the new extensions and alterations are nearly finished, and at "Charing Cross" on the Mall a re-alignment of frontages, in the form of a crescent opposite the Queen's Statue, has succeeded in converting that portion of the Mall into a very attractive centre.

In the summer capital, too, there have been progress and improvement. The Simla Hydro-Electric Scheme, whose completion reports show a total outlay of Rs. 19 *lakhs*, has undergone its first extension, and its financial returns reveal most encouraging results. In the Walker Hospital extensive improvements have been carried out at a cost of nearly Rs. 1½ lakhs, while a new road, generously provided by Sir James Walker, the founder of the Hospital, has substituted an approach with a steady and easy gradient for the precipitous descent which formerly existed. The schemes of the Simla Improvement Committee have been held in abeyance for want of funds.

Turning to out-stations, one of the principal items of interest is the new tube wells at Sialkot, which have not only provided the town with a pure water-supply but seem also to have been effective in eliminating cholera, from which epidemic the town suffered severely in past years. At Lyallpur the water-supply has been extended and the grain elevator has been constructed and is ready for use, as soon as the required plant is received from England and financial considerations will permit of a supply of electricity. At Rawalpindi and three other towns drainage schemes are being pushed forward.

Existing communications have been efficiently maintained throughout the province, at a cost of about Rs. 13 *lakhs*, and at a few places in the hills traders now enjoy the use of steel truss bridges which span mountain streams and torrents.

IRRIGATION.

Irrigation Department.

The direct receipts of the Irrigation Department during the year were about Rs. 2 *crores* and 48 *lakhs*, which represents a decrease, compared with the previous year, of over Rs. 6¼ *lakhs*. There was, however, a corresponding reduction in expenditure of Rs. 12¾ *lakhs*, the figure for this year being a little over Rs. 1 *crore* and 64 *lakhs*.

The poor nature of the monsoon and the consequent low supplies in rivers and canals accounted for a decrease both in irrigated and matured areas and, if the land irrigated by the triple canals is not taken in the comparison with last year's totals, the difference is very much more marked. The percentage of profit on the capital outlay in Productive Major Works shows a similar falling off, the figures being 10·90 and 7·56, according as interest charges are excluded or not, as against 14·70 and 11·35 in 1914-15.

The year witnessed the realisation of the great Triple Project, the Upper Jhelum Canal, after an unforeseen delay, being opened for irrigation on the 7th October 1915. Two months later, on the 9th December, the late Viceroy paid a visit to Mangla, the head-works of that canal, and performed the ceremony celebrating its completion. During the year under review, however, no irrigation was done by this canal and this fact accounts, to some extent, for the deficit in the income anticipated. Heavy expenditure was incurred on silting reaches and improvements to channels and banks on the Western Jumna Canal; leaks were discovered in the Lower Bari Doab, the channels of which required staunching; and at Khanki, on the Lower Chenab, a defence work had to be constructed. The Ravi Inundation Canals ceased to exist during the year, the area which they commanded being transferred to the Lower Bari Doab.

A temporary Division was formed, for six months, to elaborate projects for remodelling works at Dadupur and Tajewala. Proposals for the construction of a high dam across the Jumna at Koch had to be abandoned owing to the impossibility of finding suitable foundations. On

the Lower Jhelum Canal a Project Division was formed with a view to remodelling the canal and its distributaries so as to take advantage of any gain of command due to silting and to secure uniformity of action and progress in the improvements of the outlet system.

RAILWAYS.

39. During the year three new sections of railway were opened for traffic, from Jullundur City to Mukerián, the Mandra-Bhon and the Siálkot-Narowál lines. The former was completed in October 1915 and the two latter at the beginning of 1916. The length of railway line in the province at the end of the year stood at the figure of 4,398 miles, of which the State owned about 64 per cent., and worked about 86 per cent. The remainder was owned and worked by Companies or by Native States.

REVENUE AND EXPENDITURE.

40. The revenue raised in the Province amounted to Rs. 8,98,12,000, or Rs. 8,34,000 more than in the previous year. The increase is principally under Stamps nearly Rs. 3¾ *lakhs*, Forests Rs. 2,89,000, and to a smaller extent under Interest, Excise, Income-tax and Agriculture. The increase of over Rs. 2½ *lakhs* nearly under Miscellaneous is due to a change in the classification of the contributions. There was a decrease of nearly Rs. 5 *lakhs* under Land Revenue and over Rs. half a *lakh* each under Salt and Civil Works. **General.**

The total expenditure for the year was Rs. 6,11,93,000 against Rs. 6,17,67,000 in the previous year. There was an increase of over Rs. 17 *lakhs* under Irrigation Major Works due to large sums spent on repairs to the canals. An increase of Rs. 6½ *lakhs* under Famine Relief is due to the grant of concessions for carriage of fodder. Jail charges increased by over Rs. 2 *lakhs*. Education and Police charges and expenditure on Courts of Law increased by over Rs. 1¾ *lakhs* in the case of the two former and nearly Rs. 1½ *lakhs* under the latter. Pension charges also increased by Rs. 1½ *lakhs*. Expenditure on Civil Works decreased by about Rs. 27¾ *lakhs*, and under Medical by Rs. 8½ *lakhs*, and Miscellaneous by Rs. 1¾ *lakhs*.

41. The process of re-issuing notifications under the new Punjab Excise Act was completed during the year under report. Volume I of the Excise Manual dealing with liquors was completed and issued at the end of the year. Volume II (Opium) and Volume III (Forms) are nearing completion. **Excise.**

The year was marked by a further decrease in the consumption of both country spirit and opium. In the case of the former consumption fell from 382,236 to 331,603 gallons and in that of opium from 59,761 to 57,466 *sers*. The decrease in the case of country spirit is due partly to the raising of the rate of still-head duty from Rs. 5 to Rs. 6-4-0 per proof gallon from 1st April and in the case of opium to

the enhancement of the issue price from Rs. 20 to Rs. 25 per *ser* from the same date. The decrease is also partly due to the war and the organised campaign against illicit distillation and smuggling.

The revenue from Excise was Rs. 70,08,878, an increase of Rs. 87,787. The enhancement of still-head duty on country liquor caused an increase of over Rs. 2 *lakhs* under this head, but vend fees dropped by over Rs. 3 *lakhs*. There was also a decrease of Rs. 1¼ *lakhs* under Malt liquors. Thus there was a net loss of Rs. 2·3 *lakhs* under liquor. This was, however, more than counterbalanced by a rise of Rs. 3 *lakhs* under opium due to the increase in the issue price of opium. Excise expenditure increased from Rs. 2,40,814 to Rs. 2,56,995.

The number of country spirit retail licenses was reduced from 748 to 720 and now stands at one for every 27,150 of the population, against one for every 15,525 ten years ago. Licenses at fairs were greatly restricted and in Amritsar all liquor shops were removed from the interior of the city to municipal premises in the outskirts. Local and municipal bodies were constituted the regular advisers of the Collector on questions of Excise Policy. Convictions for drunkenness decreased by 170 to 961.

The consumption of *charas* increased from 21,694 to 21,851 *sers* and that of *bhang* from 89,337 to 102,562 *sers*. The increase in the latter case is to some extent explained by the unusual heat of the summer of 1915, and the consequently abnormal demand for this cooling drink. Licenses for the sale of cocaine fell from 54 to 52. The number of grains sold again slightly increased from 15,341 to 15,569. There was a reduction in sales at Simla and Ráwalpindi, but in Lahore there was increase of over 1,100 grains.

42. Collections were again better than in the previous year, rising this time by about 3½ per cent. from 1,748 to 1,812 thousands of rupees and, considering that the war broke out during the year on which the assessment was based, the result is much better than might have been expected. The fact is that many trades reaped large profits from the war. As a result of the steps taken last year in the matter of assessing securities a small income was reported under this head during the year. The group system of assessment is still under trial in some districts. A special assessment was carried out in Jullundur City and Cantonment, and resulted in an increase of over Rs. 16,000. A special staff consisting of an Extra Assistant Commissioner and 3 Naib Tahsildars and establishment was appointed for the revision of the assessment in the Lahore Division, Ferozepore and Ludhiána. A report on the first year's working is awaited.

43. Stamp revenue increased by Rs. 3,77,857, of which Rs. 2¾ *lakhs* were from the sale of court-fee stamps. This is explained by increased litigation, the institution of suits of high values and the good *rabi* harvest of 1915, which induced creditors to realise their outstanding debts by having recourse to the courts. The income from non-judicial stamps,

which had fallen by Rs. 1,04,000 in the previous year as compared with 1913-14, again went up to Rs. 19,68,957, a figure about Rs. 46,000 below the receipts of 1913-14. One cause of increase that deserves attention is the tendency under the stimulus of increased supervision to substitute formal deeds for irregular entries in account books; there is something like a return to pre-war conditions, but it is less marked here than in the case of judicial stamps. The proposal to reward officials for discovery of cases of insufficiently stamped documents did not receive the support of the Hon'ble Judges of the Chief Court and was not further proceeded with.

VITAL STATISTICS.

44. The year on the whole was not a healthy one. The unusually heavy rain in March and the beginning of April retarded the development of normal hot weather actions and thus prolonged the worst epidemic of plague since 1907. The practical failure of the monsoon and consequent abnormally dry weather during the remainder of the year resulted in the disappearance of plague in June, its reappearance later in the year only on a very small scale and an almost entire absence of malaria in epidemic form. The price of food-grains remained unusually high throughout the year. Public

There was a fall in the birth-rate which, however, only amounted to a defect of 1·3 on the average of the previous five years, and this was attributed partly to the effect of plague and partly to the absence on military service of so many young men and men in the prime of life. There was a considerable rise in the death-rate, from 32 to 36·3 *per mille*, which was chiefly due to plague, though cholera and respiratory diseases were contributory causes. The figures with regard to infant mortality, however, showed a very marked improvement. The general death-rate in towns was practically the same as that in rural circles, but there were considerable differences in respect of the various causes of death, the rural rate for plague being 6·03 in excess of the urban rate, while respiratory diseases accounted for 3·24 *per mille* more deaths in towns than in country circles. The remarks of the Government of India contained in their resolution of 1914 on the lack of complete and accurate vital statistics as constituting an impediment in the way of sanitary reform were brought to the notice of local bodies, and a project has been approved for obtaining accurate registration in a selected area by means of a special staff; the realization of this project, however, awaits the return of normal financial conditions.

The number of deaths registered as due to cholera was 13,196, the largest number in any year since 1903. Deaths were reported from every district in the province, 69 towns and 1,678 villages being infected. The experience of the year still further emphasised the importance of controlling the sanitary arrangements at all large fairs, and in this direction good work is being accomplished.

Only 1,694 deaths were due to small-pox, the lowest number recorded since registration of deaths was introduced. Eleven districts

of the province were practically free from the disease. The death-rate from fevers was, however, again very high, amounting to 14·73 *per mille*, though this figure represents an improvement on the previous year which is accounted for by the almost entire absence of epidemic malaria. It has already been observed that the epidemic of plague with which the province was afflicted in 1915 was the worst since 1907. Twelve districts suffered severely, and a total of 244,104 deaths was recorded. The epidemic had commenced in the latter portion of 1914 and the full effects were felt in the first half of 1915. Despite the severity of the outbreak the special staff were able to afford medical relief to a large number of persons in the worst affected areas. Some local bodies also entertained paid agents to assist in the work, and much valuable voluntary help was forthcoming. The increase in the recorded number of deaths from respiratory diseases was a disquieting feature of the year, but was no doubt very largely due to improved diagnosis. At the same time the heavy toll that is taken by tuberculosis of the lungs especially in towns cannot be disregarded, and the question was commended by Government to the fullest consideration of local bodies and other authority especially in connection with future extensions or alterations of towns.

Sanitation.

45. Eight *lakhs* were originally allotted to the Sanitary Board for distribution among local bodies, but it was subsequently found necessary, for financial reasons, to withdraw more than half this sum. Over Rs. 3½ *lakhs* were, however, distributed by the Board in aid of urban drainage and water-supply schemes and about Rs. 15,400 for rural sanitation. There have been noted elsewhere the adoption of simple regulations under the District Boards Act to promote the sanitation of villages and the acceptance in a number of cases of liability for taxation to meet the cost of elementary measures of conservancy. In such cases, when there is an evident desire on the part of the inhabitants for sanitary progress, Government considers that the strict requirements may be waived of the rule which makes a contribution of half the cost from local sources a *sine quâ non* for any grant-in-aid of a sanitary scheme. With regard to urban sanitation there are no fresh developments to record, but drainage and water-supply schemes figure prominently in the activities of most municipalities. An experiment in the administration of quinine to school children, which was made in Amritsar in the autumn of 1914, met with considerable success.

Medical Relief.

Dispensaries.

46. There was a net increase of six in the number of dispensaries, making a total of 473 institutions. Expenditure rose from Rs. 13,66,404 to Rs. 14,00,144, the enhanced cost of establishment exceeding the reduced outlay on buildings. An increase in the expenditure borne by local bodies was more than counterbalanced by a decline in Government contributions, and receipts, including the opening balance, showed a reduction of nearly Rs. 10,000.

Diseases and patients treated.

There was a small increase in the number of in-patients treated, but, despite severe mortality from plague and cholera, the number of

out-patients fell by 92,701. The explanation is to be found in the almost complete absence of malaria owing to an abnormally dry summer. The question of the inadequacy of arrangements for medical relief in certain districts is being taken up. The growing confidence of the people in Western surgical methods is demonstrated by the large increase in the number of both selected and other operations performed during the year.

Treatment of women. The figures for women treated as in-door patients shew a slight actual gain. A new Zenana Hospital was opened at Hissar and a missionary dispensary for women at Montgomery, bringing the total number of female dispensaries up to 24. The duplication of municipal and missionary female hospitals in a single place is a form of waste of power to which attention has been drawn. The dearth of workers, which is at present one of the chief obstacles to the spread of female medical aid, should before long give way before the facilities now provided for the education of women entering the medical profession by the Punjab Medical School for Women at Ludhiána, as well as certain measures either in being or in view for improving the prospects of the class.

General. Satisfactory progress was made with the extension scheme of the Mayo Hospital and the new Hospital and Medical College were formally declared open by His Excellency the Viceroy in December 1915. The district boards of Jullundur and Karnál and the municipal committees of Lahore and Amritsar patriotically provided beds for sick and wounded soldiers of the Indian Army. Owing to the reversion to military duty of a large proportion of officers of the Indian Medical Service a number of Civil Surgeoncies, much in excess of the number reserved for them, was held by Civil Assistant Surgeons, while over a hundred Civil Sub-Assistant Surgeons were surrendered for duty under the Army Department.

EDUCATION.

47. Despite the three scourges of war, pestilence and severe scarcity, education maintained the steady all-round progress noticed in successive previous reports for years past. As yet however the position is that only one boy in four and one girl in nineteen are under instruction, that the great majority of those receiving instruction do not go beyond the lower primary stage, that the diffusion of education among different communities and districts is still very unequal, and that, though the desire for it is steadily spreading among the middle class population in town and country—including the fairly well-to-do agriculturists—,the general attitude of the ordinary peasant and of the artisan and menial classes towards education is one of indifference or of passive resistance which cannot be easily or speedily overcome.

The chief noticeable developments were as follows :—The total expenditure rose by nearly five *lakhs*, the attendance of pupils by over 16,000, and the number of educational institutions by 285 ;

the percentage of the population of school-going age, which was actually being educated, reached 24·4 in the case of males and 5·21 in that of females, the corresponding figures ten years ago being 15 and 2·3 per cent. Untrained continued to be replaced by trained teachers and there was both a marked advance in the attendance at girls' schools and a large increase in the contributions from private sources.

Both European and Indian schools and scholars were stirred by the call to arms. In the Ráwalpindi Division alone 868 teachers and *ex*-students of secondary schools besides 1,682 *ex*-pupils of primary schools enlisted in the army and many contributions were received from schools to the various funds connected with the war.

Of a total expenditure of Rs. 112 *lakhs*, about Rs. 50 *lakhs* were provided by Government directly or through grants to local bodies, Rs. 21 *lakhs* by local bodies from their own resources, over Rs. 25 *lakhs* from fees and over Rs. 15 *lakhs* from private sources.

The number of students in the Arts Colleges rose by 379 to 3,893. The extension of higher education among the Sikh and Muhammadan communities respectively was exemplified by the increase at the Khalsa and Islamia Colleges, while the newly opened Sanatan Dharm College in Lahore should stimulate sound educational progress in the orthodox Hindu community and also help to relieve the congestion in the older colleges. The system of special University lectures was continued with success and the University Library was re-arranged by an expert from America.

The year was one of steady progress in professional and technical education. The completed new buildings of the Medical and Veterinary Colleges were opened by the Viceroy and the increased facilities provided for veterinary study are already said to be producing marked results. The removal by the Chief Court of its restriction on the number of pleaders has increased the demands on the Law College ; the staff has been reorganised and the number of students on the rolls has practically regained its former figure. The number of Industrial schools increased by 2 to 30 with 2,769 pupils.

The number of those under training for the teaching profession is rising rapidly, but the present period of training—less than a year—in the Training College and Normal Schools is hardly sufficient for the fulfilment of the ideal of the training institutions, which is to create a proper attitude of mind towards teaching, and the problem is to lengthen that period so as to ensure the object in view. The steady increase in the number of Normal Schools—the number rose from 6 to 9 during the year—will help materially to that end, and the very necessary scheme for a Junior Training College at Jullundur will be proceeded with when funds allow.

The number of pupils and recognised institutions has again increased, the former by 4,662 and the latter by 25, and the proportion

of trained teachers continues to rise. It is in the sphere of secondary education that the educational enthusiasm of local bodies and private agencies is principally displayed, as exemplified by increased expenditure during the year from private sources and district boards.

The number of primary schools increased during the year by 206, the number of pupils by 6,288, and the expenditure by a *lakh* and a half; but, though the proportion of trained teachers rose and now amounts to two-thirds of the total number, the number of teachers was still inadequate. The improvement in the pay and status of the teachers was a very satisfactory feature.

The number of Indian girls' schools rose by 52 to 971, and the number of pupils, largely in lower primary classes, by 4,371 to 49,367 or nearly double last year's increase. Female education is, however, still in its infancy in this Province, and the lack of competent teachers, especially for the lowest classes, is inevitable at this stage.

The European schools had a successful year. The number of schools and scholars remained unaltered. The expenditure from all sources rose by Rs. 40,000 to Rs. 10,52,257.

The year's results show that Muhammadans being relatively poor, are less able to afford the more expensive and less immediately useful forms of education, but they resort readily to training classes, industrial schools and technical colleges which enable them to earn their livelihood at once.

Literature and the Press.

48. The literature of the year showed signs of advance, and the educated classes inclined to take a larger share in its development generally, though, mainly owing to the rise in the cost of paper, there was a decline in the number of publications. Republications are nearly one-third as numerous as original works, and translations still bulk largely. Poetry is still the most popular vehicle of expression, but works of real merit were rare. The volume of religious literature was hardly so great as in the previous year. Abler writers began to use the novel in connection with history.

More than half the newspapers and periodicals produced in the Province are published in Lahore. The high water mark of journalistic effort was reached in 1914, but in 1915 the tide was on the ebb, there being a net decline of 4 in the number of newspapers. The causes for the decline were the absorbing interest of the European war and the failure on the part of printers and keepers of presses to keep within the bounds prescribed by Government for the legitimate conduct of their business. A demand for security under the Press Act of 1910 resulted in the collapse of 21 out of the 28 interests from which the demand was made. In one case the security deposited was forfeited. Prohibitions under the Defence of India Act were issued to four newspapers against the publication of unauthorised news and improper comments concerning the war. Numerous formal warnings were administered in regard to the appearance of

matter of a nature objectionable on political and general grounds. Out of 21 prosecutions under section 292 of the Indian Penal Code all the completed cases, except 3 which were against one and the same newspaper, were successful, while in two cases apologies were tendered and accepted. In one of the three acquittals Government appealed to the Chief Court. The *Zamindar*, the third in size of circulation among the Indian-managed newspapers published in English, ceased publication during the year.

PART II.

DEPARTMENTAL CHAPTERS.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1.—Physical Features of the Country, Area, Climate and Chief Staples.

(See pages 1—16 of the report for the year 1911-12.)

2.—Historical Summary.

(See pages 16—30 of the report for the year 1911-12.)

3.—Form of Administration.

(See pages 30—48 of the report for the year 1911-12.)

4.—Character of Land Tenures and System of Survey and Settlements.

(See pages 48—58 of the report for the year 1911-12 and the Punjab Settlement Manual.)

5.—Civil Divisions of British Territory.

(See pages 59—62 of the report for the year 1911-12.)

6.—Details of the last Census—Tribes and Language.

(See pages 62—71 of the report for the year 1911-12.)

7.—Changes in the Administration.

1. Sir Michael O'Dwyer, K.C.S.I., held charge of the office of Lieutenant-Governor of the Punjab throughout the year under report. Personnel.

2. The decided success of the arrangements for the systematic inspection of the judicial courts referred to in the last report justified the re-appointment of a third temporary Additional Judge for the cold weather of 1915-16. The Government of India sanctioned in August 1915 the retention of the Additional Secretary to Government for a further period of one year. General.

8.—Relations with Tributary States and Frontier Affairs.

I.—PHULKIAN STATES.

3. Lieutenant-Colonel B. E. M. Gurdon, C.I.E., D.S.O., remained Political Agent of the Phulkian States throughout the year.

The post of Personal Assistant to the Political Agent remained vacant.

PATIALA.

Area, 5,412 square miles; population, 1,407,659; approximate revenue, Rs. 1 crore; army and police, 5,520; Maharaja, Sir Bhupendra Singh, G.C.I.E., Sidhu Jat; age 25; has a male heir; salute, 17 guns.

4. In May 1915 His Highness the Maharaja suffered a double bereavement by the deaths of his infant son and the "Kolgarh" Maharani, and for several months afterwards his own health remained indifferent. Personal.

He spent the summer of 1915 in Simla. The death of Raja Sir Ranbir Singh, K.C.S.I., the Maharaja's uncle, in December, removed from Punjab society one of its most familiar figures. Sir Ranbir Singh sat on the Provincial Legislative Council from 1903 to 1905 and was appointed to the Imperial Council in 1910. His unfailing courtesy and kindness endeared him to all with whom he came in contact and his interest in sport and horses gave him a host of friends—European and Indian.

The war.

5. The active assistance rendered by the Darbar in the prosecution of the war continued to be a striking feature in the administration of the State. Throughout the year the State Imperial Service troops were represented at the front by a regiment of cavalry (the Rajindar Lancers) and a battalion of infantry. These were reinforced according to their requirements by drafts amounting to over 400 officers and men. Two double companies of Imperial Service Infantry were attached to the 14th Sikhs in the Dardanelles and suffered heavy losses. Egyptian despatches mentioned the names of Sardar Nand Singh and Sardar Balwant Singh of the Rajindar Lancers and Sardar Gurbakhsh Singh of the Imperial Service Infantry. Further contributions by the State towards the war included 612 camels together with sarwans for the 72nd Hired Camel Corps, and 74 sarwans for the 70th Hired Camel Corps, 78 horses for the Remount Department, bringing the total number of horses so supplied by the State to 300, the training of a large number of remounts in, and at the expense of, the State, the collection and presentation of over 350 tons of bark to a Government leather factory, and the sending of many thousands of shirts and other clothing, as well as great quantities of other appropriate gifts, such as 30 tons of sweets, ten thousand tooth brushes, eleven thousand combs and nine tons of soap-nuts, to Sikh troops in the various expeditionary forces. A generous donation of £12,500 to the Hospital for British Officers at Staines evidenced the Maharaja's personal interest in the welfare of his European friends.

Crops and irrigation.

6. Both harvests suffered considerably from lack of rain, the cultivated area shrinking to three-fourths of the area recorded in the previous year. A scarcity of fodder in the southern tracts called for State relief, but there does not appear to have been any widespread distress for the revenue was easily collected and no suspensions were granted. In spite of the deficiency of water in the canals the keen demand for irrigation was well met, thanks to careful improvement and maintenance of channels, and the area irrigated for the rabi was the most extensive on record.

JIND.

Area, 1,259 square miles; population, 271,728; approximate revenue, Rs. 26 lakhs; army and police, 1,776; Maharaja, Sir Ranbir Singh, G.C.I.E., K.C.S.I., Sidhu Jat; aged 37; has no male heir; salute, 11 guns.

Personal.

7. His Highness the Maharaja, who enjoyed good health throughout the year, was raised to the dignity of Knight Grand Commander of the Order of the Indian Empire in January 1916 and was invested with the insignia of the Order by the Viceroy in the following month at Delhi.

Administration.

8. Sardar Bahadur Sardar Shamsher Singh, C.I.E., was Chief Minister throughout the year and continued to supervise the general administration of the State, under the Maharaja, with conspicuous success. Some changes were made among the highest officials of the State. The Sadr, Judicial and Civil Courts were amalgamated and a Sessions Court with three Judges was established.

The war.

9. The Jind Darbar continued to co-operate in the war with characteristic thoroughness. The State Imperial Service Infantry served in East Africa throughout the year and made a name for itself. Its Commandant Sardar Natha Singh, Commander-in-Chief of the Jind State forces, was honoured with the Order of British India of the first class and the

title of Sardar Bahadur for distinguished service in the field, and Subedar Harnam Singh obtained the Indian Order of Merit of the second class for his gallantry at Jasin in January 1915. Wise and generous measures were taken by the Darbar to mitigate its soldiers' hardships in the field and to ensure them adequate pensions when their work is done. In the supply of men and horses the State has rendered important aid to the army, while the contributions of money and commodities made by the Darbar include such notable gifts as Rs. 75,000 to the Provincial Aeroplane fund, donations of Rs. 4,000 and Rs. 700 to the Hospital at Dehra Dun and the St. John's Ambulance Association, and presents of tents, clothing and food for its soldiers.

10. Both harvests were very poor and there was considerable distress throughout the State, owing to scarcity of fodder, alleviated to some extent by prompt arrangements by the Darbar for its import at cheap rates. In the circumstances the fact that no suspensions were reported testifies to the justness of the land revenue rates and the prosperity of the people. Crops and agriculture.

11. It was hoped that the Jind-Panipat Railway would be open very shortly after the end of the year under report. To the sum so wisely invested in this project by the State over eight lakhs was added during the year. Public Works.

12. Throughout the year the Darbar rendered valuable assistance to the Punjab Police in dealing with returned Indian emigrants of doubtful loyalty and its cordial co-operation with the Indian Police in uprooting a seditious society supported by foolish young Sikhs from adjoining British districts was warmly acknowledged by the British authorities. Miscellaneous.

NABHA.

Area, 928 square miles; population, 248,887; approximate revenue, Rs. 19 lakhs; army and police, 1,591; Maharaja, Ripudaman Singh, Sidhu Jat; aged 33; has no male heir; salute, 11 guns.

13. The Maharaja followed his usual custom in retiring to Mussoorie and Dehra Dun for the hot weather. He visited the Lieutenant-Governor at Lahore in April 1915 and in February 1916 took a prominent part at the opening ceremony of the Hindu University at Benares, an institution in which he takes a generous interest. Personal.

14. Sir P. C. Chatterjee, who had been engaged in the previous year to be the Maharaja's Chief Minister for a year, resigned in July 1915. The administration of the State generally continues on the lines it has followed during the last several years. Administration.

15. The Maharaja contributed Rs. 75,000 towards the Punjab Aeroplane Fund and sent Rs. 7,500 to a fund for supplying comforts for the troops in the field. The war.

II.—STATES OF THE BAHAWALPUR AGENCY.

16. Lieutenant-Colonel A. C. Elliott, I. A., was Political Agent throughout the year.

BAHAWALPUR.

Area, 15,000 square miles; population, 780,641; approximate revenue, Rs. 43½ lakhs; army and police, 1,935; Nawab, Sadiq Muhammad Khan, Abbasi, V, Daudputra; aged 11; salute, 17 guns.

17. His Highness the Nawab fell seriously ill at Murree with enteric fever in August and September 1915, but made a very satisfactory recovery under the care of Colonel McIvor Smith, I.M.S., the Civil Surgeon. Since his return to the Aitchison Chiefs' College he has kept excellent health and made good progress in his studies, gaining a prize for religious knowledge. Personal.

PHYSICAL AND POLITICAL GEOGRAPHY.

Administration.

18. The Council of Regency continues to conduct the State's affairs successfully. Salient features in its administration, apart from its loyal and practical interest in the prosecution of the war, were the improvement of the Education Department, to which a Director was appointed, the satisfactory conclusion of long drawn-out negotiations with the Bikaner Darbar over extradition arrangements, and the launching of State-directed Co-operative Credit Societies. The installation of electric light in the town of Bahawalpur is significant of the economic progress of this State, the most remote of the greater dependencies of the Punjab.

The war.

19. The Inspecting Officer's report shows that the Imperial Service Troops were kept as highly efficient as ever. The State troops in Egypt were reinforced by a draft in June 1916 and in July the State supplied the army with 104 camels and 30 mules. The Darbar's contributions to various funds connected with the war amounted to more than a lakh of rupees.

Crops and agriculture.

20. The spring crop was a heavy one, but scanty rainfall and shortage of water in the canals led to a poor autumn harvest. There does not appear to have been any serious suffering among the people. Settlement operations were started in the Minchinabad District.

MALER KOTLA.

Area, 167 square miles; population, 71,144; approximate revenue, Rs. 12½ lakhs; army and police, 966; Nawab, Sir Muhammad Ahmad Ali, Khan Bahadur, K.C.S.I., Pathan; aged 35; has a male heir; salute, 11 guns (2 personal).

Personal.

21. The Nawab was honoured with a Knighthood of the Order of the Star of India in June 1915. He spent part of the summer in Simla where he was received at informal meetings by the Viceroy, the Lieutenant-Governor and the Commander-in-Chief. In October 1915 the Nawab went to Kathiawar to be present at the wedding of his niece to the heir-apparent of the Mongrol State, and on his way back he visited Bhopal.

Administration.

22. There was no change in the administration during the year The Foreign Minister, Saiyid Abdullah, received the title of Khan Bahadur in recognition of his long and useful service to the State.

The war.

23. The Imperial Service Sappers, twice reinforced by drafts from the State, remained at the front in France until December 1915. The State troops then joined the Indian "D" Force and landed at Basra in February 1916. Sardar Mehr Muhammad Khan, who commands the State forces, was employed in Egypt on the staff of the "E" Force. The Darbar supplied and maintained an ambulance car for wounded arriving in Bombay. A contribution of 230 tons of bark was made to the Government leather factory at Cawnpore.

FARIDKOT.

Area, 642 square miles; population, 130,294; approximate revenue, Rs. 12½ lakhs; army and police, 373; Raja, Brij Indar Singh, Barar Bans, Jat; aged 19; salute, 11 guns; has a male heir.

Personal.

24. His Highness enjoyed excellent health throughout the year, benefiting greatly by his visits to Simla and Dalhousie in the hot weather. He continued his administrative training under Mr. Barry, I.C.S., his guardian, and after the latter's departure worked on the same lines under the supervision of the Superintendent and the Political Agent. During the year a second son was born to His Highness.

Administration.

25. The affairs of the State were successfully controlled during the year by Rai Bahadur Ganga Sahai. The new scheme of administration worked well. The several departments of Government were thoroughly overhauled, and its financial position strengthened.

The war.

26. The Imperial Service Sappers spent the year in East Africa, where they were thrice reinforced by drafts from the State. Major Mainprise R. E., the British officer in charge, who had accompanied them from

India, was killed. The news of his death evoked most sincere tributes to his memory in Farídkot, where shops were closed and the troops went into mourning. The donations made by the State to various war funds amounted to nearly a lakh of rupees and included Rs. 75,000 to the Aeroplane Fund.

III.—STATES OF THE JULLUNDUR DIVISION.

KAPURTHALA.

Area, 630 square miles; population, 268,133; approximate revenue, Rs. 30 lakhs (inclusive of about Rs. 16 lakhs income from Oudh estates); army and police, 1,401; Maharaja, Sir Jagatjit Singh, Bahadur, G.C.S.I., Ahluwalia Sikh; aged 43; has a male heir; salute, 11 guns; tribute, Rs. 1,31,000.

27. His Highness the Maharaja returned from his visit to Europe and America in January 1916. The arrangements made for the administration of the State during his absence worked well under the control of Tika Paranjit Singh and the Chief Secretary, Khan Sahib Mian Abdul Hamid, whose good services were rewarded by the title of Khan Bahadur. Personal and Administration.

28. The Maharaja's handsome contribution towards the maintenance of his Imperial Service Troops on active service, referred to in last year's report, was supplemented by a further grant of half a lakh to defray extra expenses connected with them during the year 1916-17. The war.

MANDI.

Area, 1,200 square miles; population, 181,110; approximate revenue, Rs. 5 lakhs; army and police, 360; Raja, Jogendra Sen, Rajput Mandal; minor; salute, 11 guns; tribute, Rs. 1,00,000.

29. Raja Jogendra Sen remained throughout the year at Queen Mary's College, Lahore, where he made satisfactory progress in his education. Personal.

30. Mr. Emerson, the Superintendent, was absent from the State from October 1915 until January 1916, and Mr. Fyson, Assistant Commissioner of Kulu, acted as Superintendent in addition to his own duties. The improvement in the administration continues to be most satisfactory. The management of the salt quarries at Guma and Drang was taken over by the Darbar in July 1915 with excellent results. The value of the salt excavated increased during the year by a third, with a corresponding profit to Government, who levy a due upon the sale of the output. Administration.

SUKET.

Area, 420 square miles; population, 54,928; approximate revenue, Rs. 2½ lakhs; army and police, 78; Raja, Bhim Sen, Rajput; aged 31; has no male heir; salute, 11 guns; tribute, Rs. 11,000.

31. The Raja, who towards the close of the year was in poor health, spent some time at Lahore and Bombay under medical treatment. He visited Simla on his way back to Suket. Personal.

IV.—LAHORE DIVISION.

CHAMBA STATE.

Area, 3,216 square miles; population, 135,873; approximate revenue, Rs. 3,89,000; army and police, 419; Raja, Sir Bhure Singh, K.C.S.I., C.I.E., Rajput; has male heir; aged 47; salute, 11 guns; tribute, Rs. 2,225.

32. Mian Tej Singh, son of the late Raja Sham Singh, died on the 28th of July 1915. His Highness' daughter was married in November to Sir Rajkumar Hari Singh, nephew of the Maharaja of Kashmir. Throughout the year Sir Bhure Singh ruled his State in his usual admirable manner. The previous lease of the working of the State forests having expired, His Highness secured better terms from new contractors. Arrangements were made for the annual inspection of the State hospital and jail by a medical officer from the Punjab with a view to sanitary advice. Personal and administration.

33. The construction of a driving road from Ránikhet to Chamba an ambitious and very interesting project, is engaging the Raja's attention. His Highness interested himself most usefully in recruiting for the war.

PHYSICAL AND POLITICAL GEOGRAPHY.

V.—STATES OF THE AMBALA DIVISION.

SIRMUR (NAHAN).

Area, 1,198 square miles; population, 138,520; approximate revenue, Rs. 6 lakhs; army and police, 613; Raja, Sir Amar Prakash, K.C.S.I., Rajput; aged 27; has male heir; salute, 11 guns.

Personal and administration.

34. His Highness the Raja continued to supervise the administration of his State with wisdom and success. In September 1915 he visited Simla and was received at informal meetings by the Viceroy and the Lieutenant-Governor. His Honour the Lieutenant-Governor visited Nahan in October and presented the Raja with a new banner and the grant of the King-Emperor conferring upon His Highness the dignity of a Knight Commander of the Order of the Star of India.

The war.

35. The Imperial Service Sappers, which had done excellent work in Mesopotamia, were taken prisoners with General Townshend's force in Kut, with the exception of a small portion of the Corps which was at the base when Kut fell. The Chief and his relations have been liberal in their donations to the various war funds and in April 1915 Government accepted the offer by the Darbar of a number of hospital tents.

KALSIA.

Area, 168 square miles; population, 55,909; approximate revenue, Rs. 2,60,000; army and police, 163; Raja, Ravi Sher Singh, Jat; aged 13; no male heir.

Personal and administration.

36. The hereditary title of Raja was conferred on the Chief during the year. He made good progress in his education at the Aitchison Chiefs' College, and spent the summer months at Mussoorie. The Council's administration continues to give satisfaction. The land revenue settlement of the State was completed in September 1915 and resulted in an increase of about 18 per cent. on the previous assessment.

The war.

37. During the year the State contributed nearly half a lakh of rupees to funds connected with war and invested approximately Rs. 17,000 in the 4 per cent. Government loan.

PATAUDI.

Area, 52 square miles; population, 19,543; approximate revenue, Rs. 1 lakh; army and police, 77; Nawab, Muhammad Ibrahim Ali Khan, Bahadur, Pathan; aged 28; has a male heir.

Personal and administration.

38. The Nawab was granted administrative powers with certain restrictions in February 1916. Khan Bahadur Mir Nasir Ali remains his Chief Minister. The Chief subscribed Rs. 10,000 to the Punjab Aeroplane Fund during the year.

LOHARU.

Area, 224 square miles; population, 18,597; approximate revenue, Rs. 88,000; army and police, 80; Nawab, Sir Amir-ud-din Ahmad Khan, Bahadur, K.C.I.E., Moghal; aged 56; has a male heir; personal salute, 9 guns.

Personal and administration.

39. Sir Amir-ud-din Ahmad Khan visited Simla in September 1915, and in October went to Basra on special duty under the Resident. Unfortunately his work there was cut short by ill-health and he returned to India. His youngest son Mirza Itizaz-ud-din Ahmad Khan has entered the Mayo College at Ajmere whose climate suits him better than that of Lahore. The heir-apparent Mirza Aziz-ud-din Ahmad Khan is dealing successfully with the State finances.

DUJANA.

Area, 100 square miles; population, 25,485; approximate revenue, Rs. 77,170; army and police, 145; Nawab, Muhammad Khurshaid Ali Khan, Bahadur, Pathan; aged 31; has a male heir; tribute, 50 cavalry on requirement.

Personal.

40. The administration was carried on by the Nawab. In October 1915 he attended a Divisional Darbar at Ambala held by the Lieutenant-Governor, at which the Chief of Pataudi was also present.

VI.—STATES UNDER THE POLITICAL CONTROL OF THE SUPERINTENDENT, HILL STATES, SIMLA.

41. The chief particulars of the Simla Hill States are given in the following table:—

No.	State.	Area in square miles including feudatories.	Population in 1911.	Approximate revenue.	Tribute.	Name of Chief.	Race.	Age.	Title.	Whether male heir or not.	Military forces and police.	Remarks.
				Rs.	Rs.							
1	Bilaspur ...	448	93,107	8,33,425	8,000	Bijai Chand, C.S.I....	Rajput	43	Raja ...	Yes	204	
2	Bashahr ...	3,820	88,957	1,44,442	3,945	Padam Singh ...	Do.	42	Do. ...	Yes (adopted)	13	
3	Nalagarh ...	256	49,230	1,57,460	5,000	Jogindar Singh ...	Do.	46	Do. ...	No	48	
4	Keonthal ...	116	24,570	1,00,971	...	Hamendar Sen ...	Do.	11	Do. ...	No	36	
5	Baghal ...	124	26,008	68,976	3,600	Bikram Singh ...	Do.	23	Do. ...	Yes	25	
6	Bhagat ...	36	8,797	50,000	132	Durga Singh ...	Do.	14	Rana ...	No	43	
7	Jubbal ...	288	23,727	1,98,083	2,520	Bhagat Chand ...	Do.	27	Do. ...	Yes	19	
8	Kumharsain...	90	12,219	30,000	2,000	Vidyadhar Singh ...	Do.	21	Do. ...	No	7	
9	Bhajji ...	96	14,972	33,504	1,440	Bir Pal ...	Do.	10	Do. ...	No	32	
10	Mailog ...	43	8,663	37,783	1,440	Durga Chand ...	Do.	18	Thakur ...	No	16	
11	Balsan ...	52	6,225	18,500	1,080	Bir Singh ...	Do.	52	Rana ...	Yes	...	
12	Dhami ...	26	4,484	30,000	720	Hira Singh, C.I.E. ...	Do.	39	Do. ...	Yes	25	
13	Kothar ...	20	4,016	17,000	1,000	Jagjit Chand ...	Do.	29	Do. ...	Yes	8	
14	Kunihar ...	80	2,208	6,000	180	Hardeo Singh ...	Do.	18	Thakur ...	No	9	
15	Mangal ...	12	1,267	1,000	72	Tilok Singh ...	Do.	65	Rana ...	Yes	...	
16	Bija ...	4	1,064	5,000	124	Puran Chand ...	Do.	20	Thakur ...	Yes	8	
17	Dharkuti ...	8	521	1,200	...	Ram Saran Singh ...	Do.	73	Rana ...	Yes	...	
18	Taroch ...	67	4,493	50,000	288	Surat Singh ...	Do.	29	Thakur ...	Yes	...	
19	Sangri ...	16	3,022	2,743	...	Hira Singh ...	Do.	65	Rai ...	Yes	...	
20	Kareti ...	19	2,854	8,530	...	Amog Chand ...	Do.	25	Thakur ...	No	...	Tributaries of Bashahr.
21	Delath ...	42	1,352	2,743	...	Narindar Singh ...	Do.	66	Do. ...	Yes	...	
22	Koti ...	50	8,265	44,154	...	Raghbir Chand ...	Do.	56	Rana ...	Yes	56	Tributaries of Keonthal.
23	Theog ...	144	6,345	14,381	...	Padam Chand ...	Do.	30	Thakur ...	Yes	8	
24	Madhan ...	9	3,901	5,500	...	Randhir Chand ...	Do.	29	Do. ...	No	6	
25	Ghond ...	23	1,887	5,610	...	Ranjit Singh ...	Do.	33	Do. ...	Yes	...	
26	Ratesh ...	12	472	700	...	Hira Singh ...	Do.	48	Do. ...	Yes	...	
27	Rawin ...	7	749	4,521	...	Kidar Singh ...	Do.	39	Do. ...	Yes	...	Tributaries of Jubbal.
28	Dhadi ...	25	244	1,600	...	Dharm Singh ...	Do.	28	Do. ...	Yes	...	

42. *Bashahr.*—Raja Padam Singh, who succeeded his adoptive father as Raja of Bashahr in 1914, steadily established his position in the State and gained experience in administration under the guidance of Mr. Mitchell, I.C.S. His son joined the Aitchison Chiefs' College where he did well.

43. *Keonthal.*—Raja Bijai Sen of Keonthal died in February 1916 and Government recognised the succession of his heir Tikka Hamendar Singh, a boy of 13, who is being educated at the Chiefs' College. Rai Sahib Mian Amar Singh, the Financial Manager, carried on the administration. In spite of poor harvests the new assessment worked smoothly.

44. *Jubbal.*—The management of the valuable forests in Jubbal State was made over to the Rana.

45. *Kumharsain.*—Tikka Vidyadhar Singh was formally installed as Rana of Kumharsain in November 1915. In January his heir, an infant, two months old, died. The Rana's health was poor throughout the year.

46. *Dhami.*—A regular settlement of Dhami State was begun by the Rana.

PHYSICAL AND POLITICAL GEOGRAPHY.

47. *Kunihar.*—Thakur Hardeo Singh was installed as Thakur of Kunihar with powers of administration.

48. *Koti.*—Survey work for the land revenue settlement of the State was completed in Koti.

FRONTIER AFFAIRS.

49. The failure of the kharif harvest of 1915 led to a slight increase in crime along the border. The peace of the frontier was for a time disturbed by a feud between sections of the Gurchani and Bugti tribes and by two serious dacoities, the work of gangs from outside the Province. One of these gangs inflicted some loss upon the Baloch Levy who followed it up. The quarrel between the tribes has been happily settled and the dacoities are under investigation in the North-West Frontier Province. On the whole the tumans have behaved well, while the work done by the jirgas was, as usual, very satisfactory. Among the cases most usefully decided by jirga was a long-standing dispute between the Mazari and Drishak tribes, regarding some land upon their borders. The case, which was nearly fifty years' old, had been decided by a Civil Court a generation ago, but demarcation by the Settlement Officer in 1896 had led to its revival. At a Darbar at Dera Ghazi Khan in November 1915, His Honour the Lieutenant-Governor installed Sardar Lashkar Khan as Chief of the Gurchani tuman, instead of his father Nawab Jallab Khan, C.I.E., who died in October. Nawab Jallab Khan was a strong and able Chief of a somewhat turbulent tribe.

50. Nawab the Hon'ble Sir Bahram Khan, K.C.I.E., Mazari Chief, continued his valuable aid to Government as Chairman of the Chiefs' Jirga, leading tumandar, and administrator of the affairs of his own important tribe. Sardar Din Muhammad Khan was appointed a C.I.E., in recognition of his excellent services while acting as Chief of the Leghari tuman during the minority of his kinsman, the titular tumandar, Sardar Jamal Khan. Sardar Paind Khan, who is managing the affairs of the Bozdar tuman on behalf of his aged and infirm father, is slowly but successfully consolidating his authority, in spite of the pressure of difficulties caused by the misguided action of his brother Sardar Fakir Khan. Convicted by Jirga in March 1915 of instigating dacoities Sardar Fakir Khan was released from imprisonment the following February by the Lieutenant-Governor in response to a plea for mercy submitted by the tumandars on conditions subjecting him to strict surveillance by the Commissioner of the Multan Division.

9.—Condition of the People.

[For information regarding this section *vide*—

Administration Report for the year 1911-12, paragraph 249.

Moral and Material Progress Report for the years 1901-02 to 1912-13 and Chapter VI below.]

Condition of the people.

51. The population in all the districts of the Province except Simla has increased in the last five years and the Provincial total at the close of the year was 6 per cent. over the Census returns for 1911. But for plague, which was responsible for a death-rate of 11·48 per *mille*, the year would have been a healthy one and, excluding deaths from this disease, the death-rate was lower than it had ever been since 1877. The birth-rate, though less satisfactory, compared favourably with the average of the previous five years.

52. The prosperity of the agricultural population was not on the whole seriously shaken from any cause, the war not excepted. The level of wages was maintained and there was no lack of employment for those that needed it, if not in the home district, at any rate in others. In a few districts labour was scarce owing to heavy enlistment for the army and occasional complaints were heard of the high rates demanded by agricultural labourers. The loss suffered by cultivators in the previous year owing to the slump in cotton prices was to some extent made good by a general rise in prices in the year under report.

CHAPTER II.

ADMINISTRATION OF THE LAND.

Detailed information on the subjects dealt with in this Chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Realization of the Revenue.— *Revenue Surveys and Settlements.—*	Report on the Land Revenue Administration of the Punjab for the agricultural year 1st October 1914 to 30th September 1915.

Professional Surveys.—General Report on the operations of the Survey of India for the year ending 30th September 1915.

Land Records.—Report on the Operations of the Department of Land Records, Punjab, for the year ending 30th September 1915.

Waste Lands and Government Estates.	1. Annual Report for the Colonies for the year ending 30th September 1915. 2. Land Revenue Report, *as above.*

Wards Estates.—Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1915.

Revenue and rent-paying classes.—Land Revenue Report, *as above.*

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agricultural Statistics of India, Volume I—

Area Totals—Table 1 J.	Transfers of Land – Table 6 H.
Classification of Area – Table 2 I.	
Incidence of Land Revenue—Table 5 I.	Changes in Boundaries—Appendix B.

10.—Realization of the Revenue.

FIXED LAND REVENUE.

53. The demand for the year on account of fixed land revenue was Rs. 2,17,04,451 or Rs. 4,84,911 more than the demand of the preceding year. Re-assessments in the districts of Ferozepore, Lahore, Amritsar and Sialkot accounted for an increase of Rs. 2,92,997 and deferred enhancements in Rohtak, Gurgaon and Karnal for Rs. 1,45,262. Of the total demand put down for collection more than 99 per cent. was collected. Heavy hail-storms and the failure of the monsoon in the latter part of August and the beginning of September necessitated the suspension of Rs. 47,070 in Gurgaon, and Rs. 36,865 were suspended in Gurdaspur, chiefly owing to the damage done by heavy floods in the Beas and the Ravi. The total amount suspended was, however, only Rs. 1,41,957, as compared with an average of about Rs. 5 lakhs, while remissions amounted to less than Rs. 43,000, or scarcely more than half the sum remitted last year. Collections on account of previous years amounted to over 7½ lakhs. Half a lakh of revenue already under suspension was remitted, chiefly in Hissar, Gurgaon, Rohtak, Jhelum and Attock. The recoverable balance on account of previous years not under suspension at the end of the year was only Rs. 318. The total amount under suspension fell to Rs. 3,78,020, a level only once reached during the last 10 years. The account is clear in ten districts and almost clear in six more. The total outstanding balance at the beginning of the year was Rs. 12,15,200 and at the close Rs. 5,92,620. **Demand and collections.**

54. The loss due to river action was on the whole greater than the gain by alluvion or improvement by deposit of silt, and for this the abnormal autumn floods were chiefly responsible. 42,692 acres were diluviated and the assessment on 36,687 acres was reduced on account of deterioration, while only 38,953 acres alluviated were newly assessed and the demand was enhanced on account of improvement on 34,303 acres. There was however a slight net addition to the fixed revenue roll of Rs. 25,056. **Riverain action.**

FLUCTUATING LAND REVENUE.

55. The demand on account of true fluctuating land revenue rose by more than ten lakhs to over 128 lakhs. This very **Demand and collections.**

ADMINISTRATION OF THE LAND.

large increase was in the main due to re-assessment, the extension of canal irrigation and an unusually favourable season. Fifty-eight villages on the fringe of the Lyallpur district were assessed and enhanced water advantage rates were introduced in Ferozepore and Lahore. The extension of canal irrigation from the Upper Chenab canal in Sialkot and Gujranwala and from the Lower Bari Doab canal in Montgomery and Multan swelled the fluctuating collections. The increase was over 2 lakhs in Montgomery and 3 lakhs in Multan, while in Mianwali, owing to the extension of gram cultivation, the demand was Rs. 4,17,647 as compared with an average of slightly over Rs. 3 lakhs. In Hissar, where the average amount realised is Rs. 59,000, collections exceeded Rs. 99,000. The year was one of unusual prosperity in the villages under fluctuating assessment and the demand was everywhere collected with ease. The recoverable demand left uncollected at the close of the year was trifling in amount. Of last year's balance Rs. 7,726 were remitted and Rs. 22.116 collected, leaving only Rs. 20,000 outstanding on account of both the current and previous years.

OTHER LAND REVENUE.

Demand and collections.

56. The demand on account of other land revenue was Rs. 42,12,398 or about 7 lakhs less than in the preceding year. The chief falling off was under the head "Sale of Government estates," due to the natural decrease in the number of sales of proprietary rights to colonists on the Lower Chenab canal. The decrease of nearly Rs. 16 lakhs under this head was only partially counterbalanced by the increase in the sales of waste lands and town sites and the large extension of temporary cultivating leases in the Lower Bari Doab colony.

MISCELLANEOUS.

57. The number of coercive processes for the collection of land revenue rose from 12,497 to 17,952 and the amount of arrears for the realization of which they issued from Rs. 9,67,427 to Rs. 14,50,217, of which 93·4 per cent. was recovered. Out of the total collected in this way over Rs. 7½ lakhs were collected in the Multan division. A portion of the increase is no doubt due to the larger demand for collection during the year, but there were also special causes, such as the disturbances in Jhang, to which the increase in that district is partly ascribed. The main explanation, however, is the increased attention paid to punctuality in payment. Practically the only processes employed were writs of demand, warrants of arrest, and warrants for the distress or sale of moveable property. Writs of demand accounted for 69 per cent of the processes. 2,819 processes were executed, and led to arrest in 2,304 cases, chiefly in Lahore, Gurdaspur, Gujranwala, Jhang, Multan and Muzaffargarh. Rs. 19½ lakhs of land revenue were paid in through the Post Office in twenty-five districts. Only Rs. 3,360 were remitted in currency notes. In the Rawalpindi division an experiment in the collection of land revenue on dates fixed for each village on a regular roster was initiated.

11.—Professional Surveys.

Surveys.

58. Survey work was carried on by the Riverain Detachment of the Survey Department on the Sutlej and Chenab rivers and in Kangra and Simla districts. The work on the Sutlej consisted in laying down a traverse for the field measurements in low-lying tracts in the Phillaur and Nawashahr tahsils of Jullundur district. A similar operation was completed for the riverain villages on the Chenab in the Phalia tahsil of Gujrat district. Altogether 231 square miles were traversed at a cost of Rs. 22,865. The special traverse of the Kangra tahsil, covering 494 square miles, was completed at a cost of Rs. 58,610. In Simla district the peculiar difficulty of the country made survey work expensive, the cost of the traverse of 53 square miles amounting to Rs. 8,992. Topographical survey operations were continued in Hissar, Rohtak and Gurgaon districts.

Boundary delimitation.

59. Important work connected with the provincial boundary with the United Provinces, referred to in last year's report, was carried out on the Jumna river. An agreement was secured to a permanent boundary of

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proprietary right for half the length of the boundary and proposals were made for compulsory demarcation of the remainder by legislation. The principle of compulsory determination of a fixed boundary was accepted by the Punjab Government, and is now under consideration by the Government of the United Provinces.

60. Certain disputes regarding the boundary between Jammu and the Gurdaspur and Sialkot districts were settled by agreement between the Settlement Commissioner of Kashmir and the district officers concerned.

12.—Revenue Surveys and Settlements.

61. At the beginning of the year 10 settlements were in progress. At its close measurements and record work remained to be done in four and from only three were assessment reports due. The Settlement Officers of Sialkot, Lahore and Shahpur completed the records of their districts, and in each the introduction of the new assessment in one tahsil is all that is left to be done. In Gujrat the field measurements in the Jhelum riverain area were completed and those of the Chenab riverain begun. There was little measurement of this kind remaining, but the necessity for a special quadrennial attestation of the *jamabandis* added to the work of the settlement. *Kilabandi* work was delayed by plague and in other ways, and was not complete at the end of the year. Good progress was made with record work in Jullundur and Simla. In the former measurements were completed. Record work was nearly finished in the Jullundur and Nakodar tahsils and good progress was made with it in the rest of the district. The changing of Settlement Officers owing to their ill-health caused some disorganization and retarded the progress of settlement work in Kangra. Assessment reports were submitted for Palampur, Jullundur, Nakodar, Lahore, Zafarwal, Phalia and Khushab tahsils. Reports were also submitted for the Bharauli tract of Simla district, Simla town lands, Lahore town lands and the Saidwala tract transferred from Montgomery to Lyallpur. The new demand was announced in Jullundur, Chunian, Fazilka, Zafarwal, Kharian and Khushab and its distribution completed in most of these tahsils. The duration and cost of each of these settlements and the enhancements taken in each will be found in Statements XIII and XIV appended to the Punjab Land Revenue Report. Final settlement reports for Lyallpur, Ferozepore, Una tahsil and the rest of Hoshiarpur were submitted during the year. Sanction was given during the year to the beginning of the settlement of Ambala which accordingly started in October 1915. The scheme of operations printed in Appendix V of the Punjab Settlement Manual has been revised for another quinquennium and it is expected that in each of the two years 1916-17 and 1917-18 one new settlement will be begun and three current settlements brought to an end.

13.—Land Records.

62. The experiment, mentioned in the report for 1914-15, of utilising canal patwaris for revenue record work was continued in Lyallpur and Shahpur districts and was extended to Gujrat. The comparative excellence of the work of the patwari establishment was again noticeable. Patwaris.

63. The relief afforded to tahsildars and their deputies by the attestation of mutations in cases of undisputed inheritance by selected field kanungos was so minute, the number of mutations so sanctioned amounting to only 2 per cent. of the whole, as to raise considerable doubts regarding the wisdom of continuing the experiment, more especially as the kanungos' proper work was found to suffer in quality and quantity. In accordance with a recommendation of the Clerical Establishments Committee the touring of head-quarter kanungos of the Gurgaon, Hoshiarpur and Mianwali districts was stopped experimentally. The effect will not be evident for some time. Kanungos.

64. Record work was completed during the year in Ferozepore district and for the Dehra-Una settlement, and reached the final stages in Records.

ADMINISTRATION OF THE LAND.

Sialkot, Lahore, Gujrat and Shahpur districts. Settlement operations were in progress in the Jullundur and Simla districts and in the Kangra, Palampur and Nurpur tahsils of the Kangra district. *Killabandi* work was also carried out in the Gujrat and Montgomery districts.

14.—Waste Land and Government Estates.

Progress of Colonization in the old colonies.

65. Out of a total of 2,580,176 available acres in the Lower Chenab, Lower Jhelum and Chunian colonies, 179,560 acres remained unallotted at the close of the revenue year. This area was, for the most part, land reserved for grazing grounds. Land otherwise free for disposal was sold at full market rates. The revenue settlements of the three colonies were completed, and future re-assessments will take place in the ordinary routine of settlement procedure. The colonies are supplied with communications, schools, markets and other amenities of civilization on a scale at least as generous as that of other districts of the province. Approximately 2,510,000 acres, or nearly cent. per cent. of the permanently allotted area, were sown a degree of cultivation as high as the land can carry.

Service conditions.

66. Mule-breeding is becoming more popular in the Chenab colony, where, in the Lyallpur district alone, the Army Remount Department bought the unprecedented number of 1,076 mules during the year. The difficulty of enforcing mule-breeding conditions on those bound by them decreased proportionately, and out of 1,133 lambardars so bound in Lyallpur only five were without mares. Three of the grantee camel corps were mobilised without great difficulty. The Lower Jhelum report showed steady progress in horse-breeding. Four hundred and thirty-eight remounts were purchased, a rise on last year's figures, though still less than the colony might be expected to produce.

The Lower Bari Doab.

67. The auctions of 1915 realised an average price of Rs. 188 per acre. This was considerably less than that of the preceding auction, a result due perhaps in part to the war, but also to the fact that in 1914 many persons bought what they could not pay for in the expectation that the profits of the following harvests would provide the wherewithal to meet the purchase instalments.

68. Eight regimental horse farms and three cattle farms were allotted, but the greatest part of the Colonization Officer's work lay in the allotment of peasant grants, amounting to 126,500 acres. Over 15,000 colonists had been given land permanently by the end of the year. The area cultivated rose from 34,669 to 137,909 acres. Of this 81,814 acres were sown for the *kharif* harvest. Water was not guaranteed for the *rabi* harvest but some was given.

Towns and Roads.

69. Plans were completed in conformity with the recommendations of the town planning committee for the extension of the towns of Montgomery and Okara, and the creation of new towns at Khanewal and Chichawatni. Two hundred and sixty-nine sites measuring 10¾ acres were sold at Okara for Rs. 2,28,930. Satisfactory progress was made with communications in the Montgomery district, where 157 miles of unmetalled roads were added to the 150 mentioned in last year's report, and five miles were metalled. A start has also been made in arboriculture.

Upper Chenab Canal.

70. Allotment in the Upper Chenab colony began during the year and 41,340 acres were disposed of. Of this area 13,723 acres receive irrigation only in the *kharif* harvest, and were distributed to peasants of the Gujranwala and Sialkot districts, whose lands had suffered from river action or through the construction of the canal. The land was reported to be of inferior quality, and in view of its unsuitability for *rabi* crops it was a matter of some doubt whether it could be successfully colonised. Of the perennially irrigated area 11,742 acres were sold by auction, at an average price of Rs. 179 per acre in the Lyallpur district and Rs. 154 in Gujranwala. About 3,000 acres were originally reserved for regimental horse farms, but one of these has since been transferred to the Lower Bari Doab. Twelve thousand nine hundred and

eleven acres were allotted to disappointed Jhelum grantees. Only a little temporary cultivation was attempted as the Upper Jhelum canal still awaited completion.

15.—Wards' Estates.

71. Two estates and a portion of a third were released by the Court-of-Wards during the year, and two taken over. The Sheikhupura estate which had been taken under superintendence in 1900, was partitioned between the three owners, two of the shares being released and one brought separately under the court. When taken under management the estate was burdened with debts amounting to over Rs. 6½ lakhs. These have been paid off and the assets of the estate increased by Rs. 2½ lakhs. The cultivated area of the property increased during management by nearly 70 per cent. Three estates were under the guardianship of district officers under the Guardian and Wards Act. Over Rs. 6 lakhs were invested by the Court-of-Wards in land, and over a lakh and a half in the 4½ per cent. Government Loan. A central co-operative society was established at Mamdot with the object of financing village societies among the Nawab's tenants. The court spent two lakhs on permanent improvements during the year. An enquiry was made into the management of the horse and cattle farms of the Mamdot estate and orders passed for its improvement. The Kot horse-breeding stud took 16 prizes at the Rawalpindi horse-show, and an experimental farm was started on this estate. The farms of the Mamdot and Guru Har Sahai estates did useful work. The accounts of 22 estates were audited during the year with satisfactory results.

16.—Revenue and rent-paying classes.

General.

72. The causes of the variations in the cultivated area noticed last year have been investigated. For two districts the returns were found to be erroneous and were corrected; in the others the variations were attributed either to statistical inaccuracies or to vicissitudes of season during the year 1913-14. The compilation of the new returns brought to light a discrepancy of nearly 500,000 acres of cultivated land in the previous returns from Shahpur, and it is therefore necessary to exclude that district from consideration in calculating the increase in cultivation. In the remaining districts of the province the total increase in cultivated area brought on record amounted to 111,279 acres. The increase is general. The same proportion of the cultivated area, as in the preceding year, namely, 11½ per cent., was under mortgage. The proportion held by mortgagees of non-agricultural tribes has fallen slightly and is now 5 per cent.

Loans Act.

73. The demand for loans for land improvement abated greatly during the year, the amount advanced, Rs. 1,88,880, being little more than half the sum borrowed in the year before. The explanation is said to lie in the high prices and the consequent credit prevailing in the country, which made loans easy in the open market. The expenditure on wells, though less than in 1914-15, exceeded the normal, in Ferozepore district in particular, where the introduction of the iron Persian wheel led to a sudden increase of wells, taking over Rs. 70,000 for improvements of all kinds. For the purchase of seed and cattle approximately the same amount was borrowed in the preceding year.

Transfers.

74. The main feature of the transfer statistics of the year is the decrease in the area affected by mortgages and redemptions. The cultivated area in which the proprietary rights were sold rose from 121,809 acres in the preceding year to 133,933 acres, but the latter figure is abnormally inflated by the inclusion of over 17,000 acres sold from the Skinner estate in Hissar. Mortgages of proprietary right were created on 228,668 acres and extinguished on 239,644 acres, the corresponding figures last year having been 245,631 and 282,290 acres respectively. There was a large increase of transactions of all kinds in Lahore and Sialkot districts where settlement operations were approaching conclusion and an appreciable increase in Gujranwala, Montgomery and Lyallpur.

ADMINISTRATION OF THE LAND. Value of land.

75. The selling value of cultivated land in the previous year was obscured by the magnitude of the sums spent in acquiring land in the suburbs of Lahore. Here over a crore of rupees was spent on the purchase of 3,335 acres of which 2,204 were cultivated. During the year now under report, there was a cessation of speculation in the city, and the sum spent was under 29 lakhs although the area sold increased to 4,955 acres (including 3,637 acres cultivated). The all-round sale price of land fell accordingly from Rs. 249 per acre of cultivation to Rs. 180, a rate which is, however, much in excess of any rate prevailing before 1913. From almost every district in which the statistics are not affected by urban speculation a rise in the value of land is reported, and it is clear that the appreciation of the value of land devoted to agriculture continued unchecked. The increase in the consideration for which land was mortgaged from an average rate of Rs. 124 per cultivated acre in 1913-14 to Rs. 130 in the current year, corroborates this conclusion.

Land Alienation Act.

76. The year was uneventful so far as the Land Alienation Act was concerned. The only new tribes notified were the Biloches of Ferozepore and the Sainis of Gujranwala. *Benami* transactions and misdescription of caste or tribe were still the commonest expedients for evading the Act. Claims to membership of agricultural tribes caused a great deal of work in Sialkot, but generally the amount of work thrown on the district establishment by the Act was not considerable. In Lyallpur almost half the temporary alienations were in favour of non-agriculturists and in forms permitted by the Act, and the same was the case in Jhang. It is a fair inference that evasion of the Act is generally either impracticable or unprofitable. Alienations during the year resulted favourably, on the whole, for agricultural tribes. They bought 8,498 more acres than they sold. On the other hand they pledged 28,270 more acres than they took on mortgage, and as the area redeemed by them exceeded by only 5,881 acres the area on which they created new mortgages, the rate of relief was lower than in any year during the previous decade.

Rent-paying classes.

77. The volume of litigation for the adjustment of the rents of occupancy tenants was less than in any year since 1906. Of 1,308 suits for enhancement 1,090 were successful. There were only 8 suits for reduction. Almost a third of the cases were tried in Gujrat where the great number of petitions was due to the announcement of the new demand in the Gujrat and Kharian tahsils. Elsewhere the number of suits declined towards its normal level with the completion of settlement operations. Litigation for the ejectment of tenants with rights of occupancy was also less than in previous years. Proceedings against or by tenants-at-will were normal in number. Applications for the service of notice fell from 13,417 to 11,920, and the notices issued from 30,019 to 26,971, but the ejectments made rose from 5,671 to 6,099. Proceedings were comparatively rare in the Rawalpindi and Multan divisions, and even in the districts where recourse to the courts is more frequent, the relations between landlords and tenants remained cordial.

MISCELLANEOUS.

Descent of Jagirs Act.

78. Only one declaration of a rule of integral descent was notified in the year, the annual value of the assignment being Rs. 3,420. Of 553 assignments notifiable in the province, 143 have been notified under the Descent of Jagirs Act.

Punjab Land Preservation (Chos) Act.

79. Measures for the protection of land from the action of streams and torrents under section 4 of the Punjab Land Preservation Act were extended in the Ambala district where, at the end of the year, areas in 22 villages were under regulation. A record-of-rights was prepared for the areas in the district notified under the Act and action taken towards compensating the people for restrictions imposed. The improved appearance of the western slopes of the Siwalik hills testifies to the wisdom and success of the Act.

CHAPTER III.
PROTECTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Police.—(1) Report on the Police Administration of the Punjab for the year 1915.

(2) Report on the working of the Criminal Tribes Act for the year 1915.

(3) Report of the Chemical Examiner to Government, Punjab, for the year 1915.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1915.

Prisons.—Report on the Administration of the Jails in the Punjab, 1915.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1915.

Registration.—Note on the Registration Returns of the Punjab for the year 1915.

Legal affairs of Government —Report on the Administration of the legal affairs of the Government of the Punjab for the year 1915.

Local Boards Administration.—Report on the Administration and accounts of the District Boards in the Punjab for the year 1915-16.

Municipal Administration —Report on the working of Municipalities in the Punjab during the year 1915-16.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical abstract for British India, Volume IV, Administrative and Judicial (including area, population and local funds).

17.—Legislating Authority during the year 1915-16.

80. The following changes took place amongst the Hon'ble Members of the Council :—

1. The Hon'ble Khan Zulfiqar Ali Khan, C.S.I., of Máler Kotla, was nominated in place of the Hon'ble Sardar Daljit Singh, C.S.I., resigned.

2. The Hon'ble Sir Edward Maclagan, K.C.I.E., C.S.I., was nominated in place of Mr. Mant, resigned on proceeding on leave.

3. The Hon'ble Colonel H. Hendley was nominated as a specialist.

4. The Hon'ble Raizada Bhagat Ram was nominated in place of the Hon'ble Mian Muhammad Shafi who resigned his seat on being elected to the Imperial Council.

5. The Hon'ble Mr. E. W. Parker was nominated in place of Sir Arthur Ker, Kt., C.I.E., deceased.

6. The Hon'ble Mr. T. R. J. Ward, C.I.E., M.V.O., M.I.C.E., was nominated in place of Colonel Maclagan, C.B., C.S.I., resigned.

7. The Hon'ble Mr. O. F. Lumsden was nominated in place of Sir Michael Fenton, resigned on proceeding on leave.

8. The Hon'ble Mr. H. D. Craik was nominated in place of Mr. J. P. Thompson, resigned on proceeding on leave.

9. The Hon'ble Sir E. Maclagan resigned his seat.

18.—Course of Legislation for the year 1915-16.

81. Four meetings of the Legislative Council were held during the year under report—three in Lahore and one in Simla.

Three Bills, *viz.*, (1) a Bill to make better provision for the impressment of Animals, Vehicles, Boats and Gear in the Punjab, (2) a Bill for the registration of Medical Practitioners, and (3) a Bill further to amend the Punjab District Boards Act, 1883, were introduced in Council during the year. The first received the assent of His Excellency the Viceroy on the 24th January 1916 and has become law as Punjab Act I of 1916. The second was passed by the Council in April 1916 and received the assent in May 1916. The third remained pending.

Out of the following five resolutions—

(1) Resolution *re* Sanitation of New Colonies,

(2) Resolution that the strength of the Punjab Legislative Council be raised to its full limit,

(3) Resolution *re* Promotion of Industries,

(4) Resolution on Thikri Pahra,

(5) Resolution recommending an increase in the number of Primary Schools by reduction in cost of Direction and Inspection,

the first three were withdrawn, the fourth was carried and passed, while the fifth was lost.

One hundred and forty-three questions were put and answered.

INDIA ACTS.

82. The Acts of the Imperial Council, more particularly affecting the Province passed during the year, are—

(1) The Repealing and Amending Act, 1915 (XI of 1915).

(2) The Indian Soldiers (Litigation) Act, 1915 (XII of 1915).

(3) The Enemy Trading Act, 1915 (XIV of 1915).

(4) The Indian Trusts (Amendment) Act, 1916 (I of 1916).

(5) The Defence of India (Amendment) Act, 1916 (II of 1916).

(6) The Foreigners' (Trial by Court-martial) Act, 1916 (III of 1916).

(7) The Indian Tariff (Amendment) Act, 1916 (IV of 1916).

(8) The Indian Income-tax (Amendment) Act, 1916 (V of 1916).

(9) The Indian Medical Degrees Act, 1916 (VII of 1916).

(10) The Presidency Banks (Amendment) Act, 1916 (VIII of 1916).

(11) The Indian Paper Currency (Temporary Amendment) Act, 1916 (IX of 1916).

19.—Police.

GENERAL POLICE FORCE.

General.

83. The gradual decrease in crime which has been such a satisfactory feature of the records of the last few years came to a check in the year under review. The political and economic unrest unavoidable during the continuance of war conditions, high prices, acute scarcity in the latter half of the year, and severe outbreaks of plague could not but stimulate the more disorderly elements of the community, and the resulting lawlessness expressed itself in the *Ghadr* Conspiracy and the dacoities which occurred in the spring of 1915 in the south-west of the province. In the circumstances, the increase in the number of cognizable cases dealt with by the police, putting aside offences under Local and Special Laws, from 34,061 to 35,597 was not disquietingly great. If all offences be included, the statistics actually show a reduction in cognizable cases of all kinds by 719.

Chapter III.

PROTECTION.

84. But for the weapons forged under the special legislation of the Ingress into India Ordinance and Defence of India Act, violent crime would have been even more rampant. Thanks, however, to these measures, large numbers of potential criminals of desperate character were effectually disarmed by temporary restraints and the *Ghadr* and other lawless movements promptly quelled.

85. As in 1914 the hearty co-operation of the public with the police in the suppression of disorder was on many occasions, and particularly in connection with the conspiracy, a matter of congratulation. In several instances such co-operation was signalised by remarkable displays of unselfish loyalty, physical courage and resolution. The services thus rendered to the State were generously acknowleged by Government. Grants of land were made to 122 persons, land revenue amounting to over Rs. 10,000 was remitted to villages, and no less than 2,631 individuals, including village officers, shared in monetary rewards. On the other hand, a large number of cases were characterised by a lamentable lack of co-operation by people in a position to render aid on the side of law and order. In some there was deliberate connivance; in others indifference or neglect of duty by the leaders of the people, resulting in the deplorable crimes which brought ruin and misery on hundreds of homes and led to considerable additions to the punitive police forces quartered in the disturbed areas. On a broad view, however, there was much to prove that both the police and the people were realizing in an increasing measure the necessity of mutual co-operation for the prevention and detection of crime.

Murder and dacoity.

86. The number of murders dropped to 512, a decrease of nearly 5 per cent., from the previous figure, but the dacoities and disorder that occurred in the Jhang, Muzaffargarh and Multan Districts were unprecedented in the annals of the criminal administration of the province. The causes of this sudden outburst of lawlessness were varied and to some extent obscure, but while in some places the disturbances were attributable to local economic causes, elsewhere there were signs of a widespread belief that British rule was shaken and the time was ripe for the Muhammadan peasants to release themselves from all obligations to their Hindu creditors and to start afresh with a clean sheet and such loot as they could secure by spoiling their prosperous neighbours. This explains, besides other peculiar features of some of the dacoities, the pose of some of the raiders as Germans, a pose designed to create panic among their victims rather than indicative of any particular hostility to Government, whose property was left severely alone. This outbreak fully accounts for the increase in dacoities and robberies, of which there were 149 cases more than in the previous year.

Burglary and theft.

87. A moderate increase in the number of offences against property was to be expected in view of the high level of prices and severe plague of the first six months of the year, followed by a failure of the monsoon. But the serious prevalence of crime in the central districts which raised the number of burglaries by 1,702 above the previous figure was attributed chiefly to the invasion of the country by criminal tribesmen from other parts and the increased activity of the local criminal tribes under the stimulus of this influx. It is surprising that in the circumstances of the year the number of thefts was approximately the same as in the previous year. A further drop by 171 cases of the number of cattle thefts was a natural result of the continuing high price of fodder.

Police working.

88. Judged by the criterion of convictions obtained before the courts, the working of the police exhibited a steady improvement. The one exception was in the case of murders, where there was a marked deterioration as compared with the results of the two previous years. Against this is to be set the percentage of success in dacoity prosecutions, which rose from 37 to 60.

Preventive action.

89. The difficulty in applying, and the inefficiency of, the provisions in the Criminal Procedure Code for placing habitual offenders on security

continued to be the subjects of complaint. It was proposed to deal with the defects of the system by a special Bill. On the other hand, the more energetic use of the section of the Code applicable to vagrants and suspected persons contributed materially towards prevention of crime. The continuing success of the indigenous system of village patrols mentioned last year was emphasized by the Legislative Council, who passed a resolution recommending its extended use.

Disregard of authority.

90. The disturbances on the south-west of the province and the conspiracy engineered by the *Ghadr* party have been referred to above. With regard to the former, it was noticeable that when the prominent men of the localities concerned took their stand on the side of the authorities, no serious disorder arose; but where the leaders of the people deliberately or negligently failed in their public duty, it was only where bodies of police got into touch with the malefactors and used their fire-arms with effect that trouble subsided. In dealing with the *Ghadr* movement in the Central Punjab the administration was fortunate in gaining the whole-hearted assistance of the more important men, and the police working skilfully and in close co-operation with the military authorities frustrated the plans of the anarchists completely. Nearly all the principal organisers and most active agents of the movement were brought to justice.

Criminal Investigation Department.

91. The full benefits accruing from the reorganization of the Criminal Investigation Department became apparent during a year of exceptional stress and strain. In dealing with the dangerous revolutionary movement the staff achieved eminent success. In this they were aided by the cordial and steadfast support, throughout the crisis, of the district and executive police officers, the ready assistance of the military authorities in the Lahore Divisional Area, and the thorough co-operation of the Darbars of the Native States. Government was also indebted to the committees of Sikh gentlemen who, at the cost of much personal trouble and risk, rendered loyal and invaluable services in watching and controlling the movements of thousands of returned emigrants dispersed throughout their districts.

Finger Print Bureau.

92. The work of the Finger Print Bureau reached record figures in the year under report. It was disposed of successfully.

Internal economy.

93. The actual strength of the permanent police force was slightly reduced owing to the transfer to the North-West Frontier Province of the officers and men employed on the frontier section of the railway. This reduction was more than counterbalanced by the employment of an additional body of 350 men as emergency police to cope with the abnormal conditions of the year. The enquiry into the distribution of the police of the province, mentioned in the last report, was successfully concluded and resulted in a saving of about 3 lakhs in existing and contemplated recurring charges.

Rural Police.

Miscellaneous.

94. During the year 15 zaildars, 431 village headmen and 420 watchmen were punished for neglecting their duties, while rewards for good services in criminal administration were granted to 442 headmen and 259 watchmen.

Criminal Tribes.

95. The activity of criminal tribesmen, immigrant and local, has been referred to in paragraph 87 above. An officer was specially deputed to elborate a comprehensive scheme for the settlement of wandering criminal tribes and gangs in the province.

Chemical Examiner.

96. There was a further substantial decline in the work of the Chemical Examiner during the year, the number of cases investigated being 1,488, with 4,942 articles, as against 1,833 cases and 5,511 articles recorded in 1914-15.

97. Opium continued to be the most common form of poison, and was found in 36 per cent. of the cases of human-poisoning detected. Arsenic was discovered in about 30 per cent. of the cases. The decrease of the use of this poison noticed in the previous year's report was not maintained. In cattle-poisoning cases, however, it was found both in fewer cases and in a smaller percentage of the total number of cases. A greater use was made of the services of the Imperial Serologist at Calcutta, but the number of blood-stain cases submitted to him was only about one-third of the number referred to the Chemical Examiner.

20.—Criminal Justice.

General.

98. The total number of reported offences has been steadily declining ever since the high water mark of criminal litigation was reached in 1912. In the year under report 202,220 offences were reported, or about 2,600 less than in 1915. Unfortunately these figures, though indicating a tendency for false and frivolous litigation to diminish, do not imply any true reduction in the amount of real crime, of which some of the more serious forms, such as robbery and dacoity, show a substantial increase. The causes of this increase are not far to seek, and have been alluded to in the previous section. The *Ghadr* Conspiracy and the dacoities of the South-Western Punjab resulting from political unrest led to offences sufficient by themselves to swell the ordinary tale of crime in the province. These were mostly dealt with by special tribunals constituted under the Defence of India Act. But in a year of plague and severe agricultural depression, it is not surprising that the amount of serious crime with no special political character was higher than in 1914. The efforts of the police and the magistracy to limit the scope of the influences making for disorder were on the whole wonderfully successful. Moreover, even in the statistics of serious crime there were re-assuring features. The decrease in murders has already been noted, while the number of cases of attempts to murder, culpable homicide and serious offences against the person generally fell by about 10 per cent.

Disposal of cases.

99. Of cases brought to trial, 73 per cent. resulted in conviction or compromise as in 1914, but there was a rise from 37 to 38 in the percentage of convictions, pointing to a progressive improvement in recent years. One hundred and forty-four death sentences were confirmed, or only 6 less than in 1914, when the number was the highest on record. As the figure for 1915 does not include the persons executed as the result of the first conspiracy trial conducted by the Lahore special tribunal, the number of executions carried out in 1915 was higher than in any previous year. During the last few years there has been less reluctance than formerly to impose the extreme penalty on convicted murderers, and this change has had a marked deterrent effect, and is probably one cause of the progressive decline in the number of murders. A remarkable feature of the year's work, in view of the many pressing pre-occupations of the year, was an increase in the number of serious cases disposed of by District Magistrates under section 30 of the Code of Criminal Procedure. Great assistance was rendered to the administration of justice by Honorary Magistrates, sitting singly and in Benches, who disposed of 31,000 cases or about 28 per cent. of the total number. The inadequate use made of the provisions of the Code of Criminal Procedure to dismiss complaints summarily and to award compensation in false and frivolous cases led to a suggestion for simplifying the procedure which has been communicated to the Government of India in connection with the contemplated revision of the Code.

Marriage registration.

100. Offences relating to marriage continued to decline steadily, though slowly, doubtless as the result of the registration system in force in many districts. Though unpopular among certain classes, the general opinion was that the system was efficacious in checking false cases, and the Lieutenant-Governor urged its extension to districts where it was not already in use.

Special tribunals

101. Reference has been made to the special tribunals appointed under the Defence of India Act. Two such bodies were constituted, each consisting of three members. The Multán tribunal dealt with some of the most serious dacoities perpetrated in the south-west of the province early in 1915. It convicted 75 of the accused, inflicting punishments usually ranging from 5 to 10 years' imprisonment or transportation. The Lahore tribunal dealt with the first Lahore conspiracy case and its ramifications, all of which were off-shoots of the revolutionary movement inspired by the returned emigrants. Sixteen accused were sentenced to death and 50 to various terms of transportation and imprisonment.

21.—Prisons.

Institutions.

102. The formal conversion of the old Shahpur jail into a special institution for tuberculous prisoners and the transfer of the district jail functions of the Lahore district from the Borstal Central Jail to the local jail were completed during the year under report.

Accommodations.

103. The average number of prisoners to be provided for throughout the year was nearly 2,000 in excess of the number for which existing jails are designed. Overcrowding was relieved by confining prisoners at night in tents and workshops. The provision of an additional central jail has become a matter of considerable urgency and it is hoped to commence building one as soon as the financial situation permits

Admissions.

104. The number of admissions (50,039) and the average daily population showed increases of 25 and 12 per cent. over the previous year's figures. At the close of the year the number of convicts sentenced to transportation but still detained in the Punjab was 1,220 or 224 more than at the end of 1914.

Juveniles and Juvenile adults.

105. One hundred and twelve boys and 2 girls were sentenced to imprisonment as compared with 73 children last year, of these 6 were committed subsequently to the Reformatory School at Delhi. The Borstal Institute continues to develope. Public opinion in India has yet to realize the advantages and objects of the Borstal system, and the co-operation of philanthropic bodies and individuals with the authorities, so essential for its success, is rarely forthcoming in the Punjab where a wide field is open for individual philanthrophy in this connection.

Under-trial prisoners.

106. The number of under-trial prisoners admitted during the year reached the unprecedently high figure of 25,530 or 7,187 more than in 1914. The conspiracy case in the Central Punjab and the outbreak of dacoities in the south-west accounted for the greater part of this excess. Pressure of work in the Criminal Courts was severe, and it is no matter for surprise that the average period of detention rose from 23 to 25 days, the figure for 1913.

Discipline.

107. Twenty-one prisoners or 4 more than in 1914 escaped, but 13 of them were recaptured. That discipline was on the whole well maintained is proved by the fall of more than 3,000 in the number of jail offences, of which 24,492 were reported during the year. This is considerably less than half the number recorded seven years ago since when the decline has been steady and progressive. It is a matter of satisfaction that during a period when the provincial jails contained an unusually large number of reckless and dangerous criminals, this steady improvement should not have been interrupted.

Industries.

108. An increase in expenditure on guarding and maintenance from Rs. 11¾ to Rs. 13¾ lakhs is sufficiently accounted for by the larger number of prisoners and the high prices of foodstuffs and other articles. The average cost of each prisoner's maintenance rose from Rs. 78-3-7 to Rs. 82-12-11. Over Rs. 2 lakhs were spent on building operations.

Health.

109. The daily average number of convicts sentenced to labour rose from 13,350 to 14,510, but, owing to the purchase of costly machinery and tools, the rise in the cost of raw material, and the difficulty of providing remunerative labour for the exceptionally large number of

prisoners the profits from jail factories shewed a slight decrease of Rs. 2,306. The average earnings per head fell from Rs. 20-13-0 to Rs. 19-2-0.

Financial.

110. The number of prisoners admitted to hospital rose from 9,119 to 12,361. This was mainly due to the unhealthiness of the summer. Pneumonia claimed 109 deaths as against 51 deaths in 1914 and 2,592 prisoners suffered from malarial fever or nearly twice as many as in the year before. But the death rate for all the jails showed a decline, for which the segregation of tuberculous prisoners in a special jail was doubtless responsible, as the death rate from this disease fell from 8·24 to 4·97 per thousand. The improvement of the sanitary conditions in the jails was evidenced by the fact that in a year in which plague carried off nearly 250,000 persons, or one per cent. of the free population, and cholera was widespread over the province, there were only two deaths from plague and none from cholera among the jail population.

22.—Civil Justice.

Institutions.

111. The great war, which has affected to a greater or less extent nearly every branch of the administration, appears to have had but little disturbing influence on the activities of the Punjabi civil litigant. Nor did the unfavourable agricultural conditions have their usually restrictive effect on litigation. The number of suits instituted in 1915 was 199,166 or 3,900 more than in 1914 and about 7,000 above the average of the last 12 years. So large a volume of business had not been before the civil courts since 1912. Fortunately the rise in 1915 was entirely confined to the simplest class of suits, those for the recovery of money or movable property. Suits of greater complexity and value declined substantially. The actual burden of work thrown on the courts was in consequence lighter than in 1914.

Value of suits.

112. The rise in the value of suits noticeable in last year's report was not maintained, but the total value, Rs. 3,54,92,657, was still about Rs. 24,000 above the figure for 1913. The average value shrunk to Rs. 178 for the province and to Rs. 376 for Lahore.

Disposal of work.

113. The number of original suits for disposal rose from 238,966 to 244, 555, that of suits disposed of from 207,584 to 209,720, and the number of the pending files from 31,382 to 34,835. The average duration of cases was 78 days for contested and 39 for uncontested original suits as compared with 74 and 51 days, respectively, in 1914, while the average duration of civil appeals rose from 141 to 164 days. The fact that nearly 1,000 suits were adjourned owing to the parties being absent on military service had no doubt considerable effect upon these statistics.

The Chief Court.

114. During the last few years there has been a progressive increase in the amount of civil work coming before the Chief Court. Institutions rose steadily and the number of first appeals, by far the heaviest class of cases instituted in 1915, was more than twice as many as in 1914. In the circumstances, the continuous increase in the number of disposals and the reduction in the pending file are proofs of the practical efficiency of the Court.

Execution.

115. The results of the year as a whole were not very favourable to the decree-holder applying for execution of his decree. The number of applications rose from 183,855 to 191,117 and the pending file showed 33,299 cases at the close of the year, the number at its opening having been 29,123. The percentage of realizations to claims was 26.

Insolvency Act.

116. Work under the Provincial Insolvency Act continued to increase. The proportion of persons discharged under section 44 of the Act becomes higher every year. The amount of creditors' claims unsatisfied at the close of the year was nearly 34 lakhs, while insolvents' assets were realized only to the extent of 3 lakhs. Both figures compare unfavourably with those for 1914. The law, as it stands, is admittedly unsatisfactory, and the Punjab Government has, in continuation of its previous proposals for the general amendment of the Act, submitted specific recommendations

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with the object of enabling courts to dismiss summarily an insolvency petition presented by an agriculturist debtor, when it is apparent that he could, if he chose, satisfy his creditors' claims.

Guardian and Wards Act.

117. The number of applications for the appointment of a guardian under Act VIII of 1890 rose from 2,018 in 1914 to 2,140 in 1915, but remained considerably below the average of previous years. The amendment and simplification of the rules framed under the Act by the Chief Court appreciably lightened during the year the work of the courts in administering minors' estates.

23.—Registration.

General business.

118. There were 82,076 compulsory registrations of transactions during the year, a decrease of 1 per cent. from the figure for 1914, sales and mortgages having dropped 1 and 6 per cent., respectively. In three districts in which it was most pronounced the decrease was attributed to the direct or indirect influences of the war. In another district it was ascribed to the prevalence of plague during the early part of the year, and in another to a bumper harvest which satisfied the immediate needs of the people. In Ferozepore, Shahpur and Gujránwála Districts compulsory registrations were more frequent than in 1914. The statistics for Ferozepore were abnormally swollen by the registration of some thousands of leases by the Mamdot estate. In Shahpur drought and general scarcity were responsible for an increase of registrations of small value. In Gujránwála the increase was accounted for by the extension of municipal limits at head-quarters, and a growing tendency of the money-lending classes to invest in and build on suburban property in order to meet the new demand of the well-to-do town dwellers for residences removed from insanitary environments. The value of the property transferred declined by over 11 per cent. to a level lower than that of 1913.

119. A remarkable rise in value, of about 63 per cent., in transactions optionally registered affecting immoveable property, of which the number decreased by nearly 4 per cent., is explained by the registration of a few awards of high value in Rohtak, Miánwáli and Amritsar districts.

Land Alienation Act.

120. The very small number of *benami* transactions points to vigilance on the part of district officers in frustrating attempted evasions of the Land Alienation Act.

Income and expenditure.

121. The total income from registration was Rs. 3,46,564 and the total expenditure Rs. 1,43,272. The net profits on the operations of the Department shrunk by Rs. 20,000 below the figures for 1914. Expenditure, on the other hand, rose by 2 per cent., mainly on account of increased salaries to compensate for the high cost of living and the cost of additional establishment sanctioned towards the end of 1914.

23 A.—Legal Affairs of Government for 1915.

122. The number of references for opinion disposed of by the Legal Remembrancer was 952 as compared with 1,146 in 1914 and 910 in 1913.

123. The Secretary of State was plaintiff in 13 original suits during the year. Of these 6 were decided in favour of Government, none against and 7 remained pending at the close of the year. Of the 6 cases decided in favour of Government one was for possession of land and five were for the recovery of money. The total amount involved was Rs. 23,985-13-7.

124. The Secretary of State was defendant in 128 original actions including land acquisition cases. Of the 30 land acquisition cases, 27 were decided and 1 was withdrawn whilst 2 remained pending at the close of the year. The Collectors' awards were upheld in 14; while in 13 cases they were enhanced. The total enhancement amounted to Rs. 1,94,427-2-3. The amounts actually claimed by the owners above the Collectors' awards were over 15 lakhs.

125. Of the other 98 civil suits, 42 were decided in favour of and 14 against Government, whilst 42 remained pending at the close of the year.

The total amount involved was on account of—

		Rs.	A.	P.
(*a*) Land acquisition cases	...	15,08,943	2	4
(*b*) Other cases ...	...	4,53,674	8	11
Total	...	19,62,617	11	3

In class (*b*) the total amount claimed in decided cases was Rs. 2,60,644-12-3, out of which Rs. 1,299-6-10 only including costs was decreed against Government, whilst Rs. 626-2-3 was awarded to Government on account of costs in cases in which the plaintiffs' claims remained unsuccessful. The Secretary of State was appellant in 21 appeals, of which 15 remained pending at the close of the year, 3 were decided in favour of and 3 against Government. The Secretary of State was respondent in 34 appeals of which 16 were decided in the year, 12 being in favour of and 4 against Government, while 18 remained pending at the close of the year. No original revenue suits or appeals were brought by or against Government.

126. The criminal business stood thus—

There was 1 original trial in the Chief Court which was decided in favour of the Crown. In the subordinate courts, out of the 18 cases 6 were decided in favour of and 4 against the Crown, while 8 remained pending at the close of the year. Out of the 1,838 appeals in the Chief Court 1,171 were decided in favour of and 405 against the Crown, while 262 remained pending at the close of the year. In the subordinate courts there was only 1 appeal which was decided in favour of the Crown. Out of the 292 revision applications 196 were decided in favour of and 55 against the Crown, while 41 remained pending. There were 73 miscellaneous cases before the Chief Court, of which 72 were decided in favour of and 1 against the Crown.

24.—District and Local Boards.

127. The general constitution of the district boards remained unchanged during the year. Only 14 out of 133 vacancies were contested, a figure that does not indicate much desire for the elective system in 11 districts of the Western Punjab where it is not at present in force and where Government has its extension under consideration. From several districts it is reported that candidates were secured with difficulty and only on official pressure being brought to bear. In three cases the vacancies had to be filled by nomination owing to a want of candidates, and nearly 10 per cent. of the seats open to election are now filled by members so nominated. The fact must be faced that the rural population have been slow to appreciate and assimilate the election system, which is still foreign to their ideas and traditions. The result is that once a member has secured a seat by election, which in practice means either by popular acclamation or by acquiescence, he is in nine cases out of ten, if he so desires, re-elected without opposition on the expiry of his term.

128. The working of the boards shows on the whole that a steady development is in progress in some districts and affords re-assuring proof of a growing spirit of a public service and an intelligent appreciation of the duties of district representatives. Government recognise that a strong financial position is essential for intelligent and efficient administration, and the revision of the financial relations between Government and district boards, which is now in progress and has actually been introduced in the Rawalpindi Division, provides a most suitable opportunity for a thorough review by boards of their affairs with a view to an intelligent distribution of their resources among the many objects for which provision has to be made. The Government grants are being calculated so as to allow due provision for the maintenance of all existing services and a reasonable amount of development,

but the necessity of increasing the resources of the boards by local taxation from a rate which is ridiculously low in comparison with European countries like France and Italy, which also have a highly developed rural self-government, will have to be seriously faced.

129. Gross income fell by Rs. 7½ to Rs. 74½ lakhs, owing to a decline both under Government grants and other contributions; the figure is, however, more than double the average of the period 1902-03 to 1905-06. Expenditure rose by 11½ to over 86¼ lakhs.

130. More was both received and spent for education than in the previous year. The amount now received from fees in secondary schools amounts to 13 per cent. of the total expenditure, a figure which compares very favourably with that in other provinces. Nearly Rs. 5 lakhs were spent on the provision of new buildings with much assistance from private contributions. The proportion spent on education was generally ample.

131. Both receipts and expenditure for Medical purposes rose, though the attention paid to this department of their activities by the boards of certain districts was not sufficient. Most boards have now accepted the principle that fees should be charged to those able to afford to pay them, but the figures show that the practice lags very far behind the theory.

132. Steady advance was made in the spheres of improvement of agriculture and of the breeding of horses, cattle and sheep. The system of selling at half price to selected applicants bulls purchased by the boards from the Hissar Farm and the Civil Veterinary Department was adopted with excellent results in some districts and might be extended. Castration of inferior bulls and stallions with a view to controlling breeding received much attention during the year. Interest in sheep and goat breeding is gradually spreading, private individuals as well as boards making satisfactory purchases of Government bred rams of high quality. Appreciation of the work of the Civil Veterinary Department is growing among the people. Much assistance was given by the boards to the cause of scientific agriculture by the endowment of scholarships at the Lyallpur College, by the establishment of demonstration farms, and by visits of selected members whose travelling expenses are borne by the boards to the Government Agricultural Farms.

133. Taxes for the promotion of sanitary improvement are now in force in several villages in various districts. A Bill has been drafted and circulated for opinion which is intended to provide a simple machinery of self-government suitable to small towns and the larger villages, but for smaller villages Government has decided that the imposition of taxation and the passing of simple regulations under the District Boards Act will meet existing requirements. At present only a few districts have shown any inclination to adopt such regulations, and the Sanitary Board has intimated to them that it is prepared to assist in financing suitable schemes of sanitation, provided that a portion of the cost is forthcoming from local sources.

25.—Municipal Administration.

134. The number of municipalities declined to 100 during the year owing to the reduction of three towns to the status of notified areas. The boundaries of several municipalities were revised so as to include new urban areas which had grown up in their vicinity or to exclude purely agricultural lands to which it was desirable that the Land Alienation Act should apply. In the case of 29 out of the 100 municipalities where the elective system has not yet been introduced Government have invited the opinions of local officers and of the committees as to whether the system should be extended, but the replies which have so far been received do not indicate any very general desire for a change, though some municipalities would appear to be ripe for and desirous of it. There was a considerable falling off—from 46 to 30·5—in the percentage of vacancies contested at elections, which is the more difficult to explain as the fact that the newly elected members were in most cases qualified to vote for the Legislative Council elections might

have been expected to stimulate contests; the percentage was not higher in any division than 48·5, although in many cases where elections took place the contests were exceedingly keen and in four municipalities over 90 per cent. of the voters came to the poll. Undesirable practices, such as false impersonation, use of forged votes and open sale of voters' certificates, which cast discredit on the whole system of elections and discourage some of the best men from coming forward as candidates, were unfortunately by no means uncommon, and with a view to eliminating or reducing them Government is engaged in the preparation of a revised set of rules of general application for the registration of voters and the conduct of elections. All the municipalities save 7 are empowered to elect their own presidents subject to the approval, which is readily given in the case of persons who command the confidence of the people and of the municipal members, of Government or of the Commissioner, yet it is significant that in practice the great majority of the committees still either elect a president from among the *ex-officio* members or apply to have a president appointed.

135. The working of the committees was on the whole satisfactory in the matters both of the number of meetings held and of the attendance of members. There were, however, not wanting illustrations of defects which retard the development and efficiency of urban self-government in the Province, *viz.*, disinclination to interfere with private interests for the public good, actual subordination of the general welfare to individual profit, jealousy shown by committees of the exercise of executive power by their own officers, and a concern on the part of officials rather to keep on good terms with individual members than to discharge their duty to the tax-payer.

136. The total income of the municipalities (over Rs. 74¼ lakhs) was Rs. 8¾ lakhs less than in the previous year, the amount of loans and grants from Government falling off by about Rs. 15 lakhs, and the fall in income was accompanied by a corresponding decrease, from nearly Rs. 83¾ to under Rs. 75 lakhs, in expenditure.

137. In the matter of education most committees are fairly discharging their responsibilities. In the improvement of sanitation and generally of the amenities of life in municipal towns there has on the whole been steady progress; the draft Bill which aims at providing small towns and large villages with a form of administration suitable to their size, resources and capabilities has already been referred to in paragraph 132. The percentage of income devoted to medical relief is at present only about half the percentage formerly prescribed by rule as the minimum provision to be made by local bodies, and Government has enjoined the necessity for efforts to increase the income from fees so that more adequate provision may be made. Public Works were the least satisfactory department of municipal activity, adequate control over and inspection of the working of employés being in many cases sadly wanting.

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138. The total receipts from direct taxation amounted to only about Rs. 4½ lakhs, of which about three-quarters were raised in the hill municipalities, whereas the net income from octroi was nearly Rs. 38¾ lakhs, a figure over Rs. 3 lakhs greater than in the previous year and higher than in the two years before the outbreak of the war. The octroi system is one that imposes an undue burden on the very poor while refunds and collection charges bulk over-largely, and the time has arrived to press on municipalities the need for more enlightened views. The substitution of a terminal tax for octroi has now been finally sanctioned for two municipalities and a terminal tax on certain exports has also been sanctioned for a third and since the close of the year for the notified areas of the Lyallpur district; no further proposals to replace octroi by this form of taxation have however been received by Government, though they are said to be under consideration in a few cases. A more extended use of

the powers to impose a tax to pay for the cost of water-supply has been commended to the notice of committees.

26.—Military (Volunteers).

139. The strength of the Volunteer Corps on the 30th September 1915 is reported to have been as follows:—

Corps.	Company.	Stations.	Officers.	Non-Commissioned Officers.	Privates and Troopers.	Total enrolled strength.	Total number of efficients.	Sergeant-Instructors.	Remarks.
Punjab Light Horse.	...	Field Officers and Staff ...	9	...	...	9	...	5	
	A	Lahore	6	26	180	212	197	...	
	B	Ambála	1	8	43	52	47	...	
	C	Ráwalpindi	1	12	67	80	67	...	
	D R½	Peshawar	...	5	16	21	20	...	
	D L½	Amritsar	...	3	18	21	20	...	
	Detachment	Delhi	5	9	46	60	50	...	
	E	Lyallpur, Multán, Sargodha, Montgomery	...	6	36	42	42	...	
	...	Reservists	1	...	60	61	61	...	
	...	Add for Supernumerary Officers	11	...		11	..	...	
		Total ...	34	69	466	569	504	5	
1st Punjab Volunteer Rifles.	...	Field Officers and Staff ...	12	...	...	12	...	8	
	A, B, C and Cadet ½ Company.	Lahore	9	30	314	353	325	...	
	D	Ráwalpindi	2	5	98	105	101	...	
	E	Amritsar	3	9	67	79	70	...	
	F	Delhi	3	9	88	100	98	...	
	G	Murree	3	10	94	107	107	...	
	H	Do.	1	12	59	72	72	...	
	I	Peshávar	4	18	104	126	118		
	K	Ferozepore	4	7	114	125	116	...	
	L	Srinagar	4	9	47	60	60	...	
	M	Siálkot	2	4	49	55	48	...	
	N	Delhi	1	1	24	25	26	...	
	...	Reservists	1	...	131	132	131	...	
	...	Add for Supernumerary Officers	14	...	...	14	...		
		Total ...	63	114	1,189	1,366	1,272	8	
Simla Volunteer Rifles.	...	Field Officers and Staff ...	9	...	...	9	..	4	
	A, B, C, D, E and H.	Simla	15	66	507	583	475	...	
	F and G	Sanáwar	5	27	155	187	167	...	
	...	Reservists	2	..	66	68	35	...	
	...	Add for Supernumerary Officers	17	...	...	17	...	...	
		Total ...	48	93	728	869	677	4	
North-Western Railway Volunteer Rifles.		Field Officers and Staff ...	14	...	..	14	...	5	
	A, B, C and D	Lahore	4	44	469	517	529	...	
	E	Ambála	1	8	145	154	154	...	
	F	Sahâranpur	3	8	132	143	143	...	
	G	Ráwalpindi	2	16	151	169	170	...	
	...	Reservists	...	...	24	24	24	...	
	...	Add for Supernumerary Officer	...	...	...	...	...	...	
		Total ...	24	76	921	1,021	1,020	5	

140. The Punjab Light Horse, the Punjab Volunteer Rifles and the North-Western Railway Volunteer Rifles were inspected in February 1916 and the Simla Volunteer Rifles in September 1915. The reports in all cases were quite satisfactory.

141. During the year under review the Volunteer Corps of the Province were able to afford the Military Authorities a considerable amount of assistance in the way of maintaining reserves and completing establishments and between them contributed no less than 107 officers towards the Indian Army Reserve of Officers. Five of their members also received Commissions in the regular Army and a proportionally large number enlisted or rejoined the ranks. One officer and 28 non-commissioned officers and men joined Armoured train detachments, thirty-three joined Machine Gun Sections and 69 are now to be found in the Supply and Transport Corps either on active service or on Military duty in India.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Agriculture.—(1) Report on the Operations of the Department of Agriculture, Punjab, for the year ending June 30th, 1916.

(2) Annual Report of the Punjab Veterinary College, Civil Veterinary Department, Punjab, and the Government Cattle Farm, Hissar, for the year 1915-16.

(3) Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1915.

(4) Report on the working of Co-operative Societies for the year ending 31st July 1916.

Weather and Crops.—(1) Report on the Weather of the Punjab for the year 1915-16.

(2) Punjab Seasons and Crop Report for 1915-16.

Horticulture.—Report on the Lawrence Gardens, Lahore, for the year 1915-16.

Forests.—(1) Progress Report on Forest Administration in the Punjab for 1915-16.

(2) Progress Report on Arboriculture in the Punjab for the triennial period 1911-12 to 1913-14.

(3) Report on the Administration and Accounts of the District Boards in the Punjab for the year 1915-16.

(4) Land Revenue Report, as above.

Manufactures.—Report on the working of the Factories Act in the Punjab during the year 1915.

Trade.—(1) Report on the Internal Trade of the Punjab by Rail and River for the triennium ending 1915-16.

(2) Report on the External Land Trade of the Punjab for the year 1915-16.

(3) Report on the Joint Stock Companies in the Punjab for the year 1915-16.

Public Works.—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for the year 1915-16.

Irrigation.—(1) Administration Report of the Public Works Department, Punjab, Irrigation Branch, for the year 1915-16.

(2) Land Revenue Report, as above.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agriculture.—Statistical Abstract for British India, Volume I, Commercial Statistics.

Forest.—Statistical Abstracts for British India, Volume II—Financial Statistics.

Crops.—(1) Agricultural Statistics of India, Volume I, Tables II and III.

(2) Estimate of Area and Yield of certain Principal Crops in India.

(3) Prices and Wages in India.

(4) Variations in Indian Price Levels.

Mines and Quarries.—(1) Statistical Abstracts for British India, Volume I, Commercial Statistics.

(2) Records of the Geological Survey of India, Volume XLVII, Part 3.

(3) Report of the Chief Inspector of Mines in India.

Manufactures.—Statistical Abstracts for British India, Volume I, Commercial Statistics.

Trade.—(1) Inland Trade (Rail and River borne) of India.

(2) Statistical Abstracts for British India, Volume I, Commercial Statistics.

Railways.—Administration Report on Railways in India for the calendar year 1915-16.

Irrigation.—Statistical Abstracts for British India, Volume I, Commercial Statistics.

27.—Agriculture.

SCIENTIFIC.

General.

142. A third Assistant Director of Agriculture was appointed during the year. Sanction was received from the Secretary of State for the appointment, for five years in the first place, of an Entomologist for the Punjab, but owing to financial pressure steps were not taken to fill the appointment immediately.

Lyallpur College.

143. For the Lyallpur college the year was one of marked success. The college income increased and its expenditure diminished. There was a stronger demand for admission both to the English and vernacular classes and a keener interest in the college was evinced by the public. Forty students joined the English course in July 1915. Nineteen students appeared at and passed the leaving certificate examination. Of 22 candidates at the examination of the first year class 20 passed.

144. The vernacular class is becoming specially popular with zamindars. Out of 54 applicants 31 were admitted and 24 completed the course. All except 7 were sons of agriculturists. Many district boards presented scholarships for both the ordinary and vernacular classes.

145. A growing demand among private land-owners for diplomatees of the college as managers of their estates was a gratifying proof of the useful work done by the institution. Three such applications, all from European landlords, received during the year, were complied with. It was decided that two appointments of zilladar in the Irrigation Branch of the Public Works Department should be allotted annually to graduates of the college. A proposal to affiliate the college to the Punjab University is under consideration.

Experiments and research.

146. The most interesting of the various investigations pursued by the Agricultural Chemist was the experiment at Narwala in reclaiming saline lands. The end of the year saw its success assured. It was shown that for sum of about Rs. 18 per acre with an additional charge for water it should be possible to reclaim ordinary land so infected, thus turning land worth Rs. 50 per acre into first class land worth as much as Rs. 300. Practical experiments at Lyallpur based on the work of the Economic Botanist produced important results. Among these is the proof of the unsuitability of sandy soils for the growth of American cottons. The tests for discovering the best type of cotton were inconclusive, but favoured the choice of the American variety known as 4 F., in the popularisation of which the Agricultural Department continued to do successful work.

Implements and demonstration work.

147. In spite of the difficulty of transport and the high price due to the war, the sale of implements of European and American manufacture increased considerably. The total number of improved implements sold was 1,325, of which nearly 1,200 were ploughs. Much experimental work was done at Lyallpur with a view to the cheap production of the simpler instruments, such as harrows and hoes, which, while not so efficient as the foreign articles, would still be a distinct improvement on those commonly used. Being constructed chiefly of wood, they can be sold at rates acceptable to the zamindar, who is apt to object to the expense of the metal ploughs and other instruments hitherto offered to him.

148. Several demonstrations of improved implements were given at horse and cattle fairs and similar gatherings, notably one at the Sikh Educational conference at Tarn Taran in April 1915. Here 25,000 leaflets describing various implements were distributed in response to a great demand.

STORAGE AND DISTRIBUTION OF SEED.

Cotton.

149. The progress made in the introduction of American cotton was striking. The type known as 4 F. is remarkable for its great yield

and long staple. Over 7,000 maunds of this cotton were sold by auction in the Chenab and Jhelum colonies at a premium over the price for country cotton varying from Rs. 2-8-0 to Rs. 4. Probably nearly 3 lakhs of rupees were added in a single season to the incomes of cultivators in the Lower Chenab colony alone by its use. With these facts in view it is not surprising that the demand for seed was unprecedented. All the seed available was disposed of at a price 12 annas a maund more than that of ordinary cotton, and the estimated acreage under American 4 F. rose in the year from 7,700 to 50,000 acres, a most gratifying result of official effort on behalf of the Punjab agriculturist.

150. The area sown for the wheat crop of 1916, with seed distributed by the department, was 30,170 acres, of which 27,500 were sown with the variety known as Punjab 11. For the next crop 39,000 maunds of Punjab 11 seed were stored in the Lower Bari Doab, Chenab and Jhelum colonies. Of the variety classified as Pusa 12, which was the only other type of wheat distributed, 8,000 maunds were kept against the next harvest in the Central Punjab districts. Both these varieties yield about a maund an acre more than the country wheat they replace. **Wheat.**

151. The co-operative credit societies gave help in the distribution and stocking of seed, and acted as agents for the sale of improved implements.

152. Five hundred and seventy-five ounces of French silkworm seed were reared by the department, and distributed in Siálkot, Ambála, Hoshiárpur and Gurdáspur districts, the last taking 400 ounces. Villagers reared 565 ounces. The results were not satisfactory owing to weakness in the seed and a season unfavourable for the growth of succulent mulberry leaves. The produce, 73 maunds of dry cocoons, was sold for Rs. 5,087. The Salvation Army opened a school of sericulture in Simla with the aid of a Government grant. **Sericulture.**

153. There were signs that scientific apiculture might, with propitious seasons, become an established industry in parts of the hill districts. The appointment of the Government Apiculturist was extended for two years. Lectures on bee-keeping were given at Sanáwar near Simla. Several of the Hill Chiefs joined the Simla Bee-keepers' Association, of which there were 36 members in 1915. **Apiculture.**

154. Date culture continued to show successful results and the fruit grown by the department fetched a price comparing most favourably with that paid for the ordinary dates of the country. **Date palms.**

Loans to Agriculturists.

155. Advances to an amount of Rs. 4,53,107 were granted under the Land Improvement Loans Act (XIX of 1883) and the Agriculturists Loans Act (XII of 1884) as compared with Rs. 5¾ lakhs in the previous year. The good credit of the people during the year resulted in a small demand for Government aid, loans being easy to secure elsewhere.

156. The sum advanced for land improvement thus fell to Rs. 1,88,880, a reduction of 40 per cent. below last year's figure. More than a third of this sum was again taken by Ferozepore district. The balances at the beginning of the year were Rs. 15,65,472 on account of principal and Rs. 4,213 on account of interest. Interest to the extent of Rs. 93,518 fell due during the year. Collections on account of principal amounted to Rs. 2,26,582 and on account of interest to Rs. 88,824. Balances of principal and interest overdue at the end of the year were, however, Rs. 19,222 and Rs. 8,335 respectively. The financial gain to the Provincial Government was Rs. 33,869, or about the same as last year.

157. The amount advanced under the Agriculturists' Loans Act was Rs. 2,64,227, almost the same as in the previous year. The money was required almost wholly for the purchase of bullocks, although in Gurgaon, Montgomery and Muzaffargarh districts seed also had to be provided with

borrowed money. Rs. 3,76,985 on account of principal were collected and Rs. 24,954 on account of interest. The balances of principal at the beginning and end of the year were Rs. 4,97,626 and Rs. 3,83,689. The financial result of operations under this Act was a gain of Rs. 7,637.

Co-operative Societies.

General.

158. The year was a period of trial for the co-operative movement; the province had not recovered from the financial crisis of 1913-14 when the war broke out, and a bad autumn crop, followed by a poor spring one, prevented any improvement in the economic situation. A severe scarcity of fodder in many districts subjected the agriculturists to a trying ordeal. In consequence of this series of adverse factors, there was a considerable demand for loans by members while repayments could with difficulty be made. The same causes led depositors to withdraw their money. Confidence in the movement, however, showed no signs of wavering. In order to assist Central Banks to meet the claims of depositors, the Local Government placed one lakh of rupees at the disposal of the Registrar, but only Rs. 45,000 of this was utilised. The big Central Banks at Jullundur and Lahore were able to come to the assistance of the more sorely pressed institutions, and with the advent of the monsoon the withdrawal of deposits diminished.

159. The outstanding feature of the year is that though deposits decreased by Rs. 7·5 *lakhs* share capital of agricultural societies alone increased by Rs. 5 *lakhs* and their reserve fund by Rs. 12·3 *lakhs*. The share capital of Central Banks increased by over Rs. 2 *lakhs*. The result was an increase in the proportion of capital owned by the societies and a decrease in that drawn from depositors. The working capital of primary societies increased by Rs. 12 *lakhs* and of Central Banks by Rs. 2·3 *lakhs*. These figures in a year of economic depression bear eloquent testimony to the financial strength of the movement.

160. No effort was made to increase the number of societies except in Muzaffargarh, where the conditions seemed to make it advisable to attempt the introduction of co-operative credit. Primary societies increased by 50. Membership declined by 11,774 to 144,635 owing to gradual insistence on the condition that each member should hold one share. In the early stages of the movement individuals were allowed to join on payment of a fee, and many of these who had ceased to have transactions with the society were eliminated.

Central Banks.

161. The Central Banks continued to do well. Four new banks were opened during the year of which one, however, omitted to secure registration until after its close, and one Union was wound up. Another Central Bank was completely reconstituted on a share basis. Inpursuance of a recommendation by the Committee on Co-operation, 495 more primary societies acquired shares in the Central Banks and with them some control in the management.

Central Banks increased their share capital by Rs. 2·4 *lakhs* to Rs. 10·58 *lakhs*, and their reserve fund by Rs. 50,000 to Rs. 1·38 lakhs. Their total working capital is now Rs. 55·3 *lakhs* of rupees. Their profits for the year were over Rs. one lakh.

Agricultural Societies.

162. These societies have come well out of a series of adverse circumstances. They lent Rs. 33·2 *lakhs* and recovered Rs. 25·3 *lakhs* principal, Rs. 12·3 *lakhs* interest (net) and Rs. 5 *lakhs* share capital. At the close of the year loans outstanding amounted to Rs. 1,20,37,880. At a very moderate estimate they saved their members nearly Rs. 14·5 *lakhs* in interest and made over Rs. 8 *lakhs* of profit for them, a clear gain of over Rs. 22 *lakhs* in the year. They hold nearly Rs. 70 *lakhs* of their own money beside Rs. 10 5 *lakhs* of members' deposits. They owe Rs. 46 *lakhs* to Central Banks and Rs. 14 *lakhs* to outside depositors. Regarded as a whole, the financial position of these societies is very saisfactory indeed. The system of share payments by annual instalments coupled with the

prohibition against any distribution of profits for ten years is creating a large fund of members' own money which is rapidly approaching the total required for all ordinary needs.

Non-agricultural Societies.

163. Weavers' Societies have had to face a large increase in the price of raw material, especially of dyes, while, as was to be expected in a year of economic strain, the demand for their goods declined. The central yarn store has worked satisfactorily. The black-smiths' societies have met with fair success.

Other non-agricultural societies are making steady progress but the co-operative spirit is not always as strong as is to be desired. The Simla societies contain many good members whose enthusiasm should ensure success. An effort to start a trader's co-operative bank in Lahore failed owing to the apathy of those for whose benefit it was intended.

The co-operative shops for the sale of grain have suffered loss through the dishonesty and malpractices of their staff. They failed to adhere strictly to the essential principles and were led astray by a desire to make profits.

The system of referring disputes to arbitration was utilised freely during the year; generally, the defaulters paid up without the necessity of filing the award in court. In no case has any one, member or non-member, suffered any actual loss.

VETERINARY AND LIVE-STOCK.

General.

164. The subordinate establishment of the Civil Veterinary Department was 25 per cent. below its sanctioned strength in 1915. Nevertheless the record of work showed no falling-off. The number of castrations was nearly double that of the previous year. The progress made in this respect is an encouraging proof of the extent to which popular prejudice is being overcome. Further evidence that the value of the department's work is being recognised by the people is found in the number of inoculations and vaccinations against rinderpest and other diseases performed in a year singularly free from those diseases and generally very healthy. In spite of pressure of work at head-quarters the department was able to assist the Army Remount Department in various ways.

165. The fine new college buildings at Lahore were opened in December 1915 by the Viceroy. The increased facilities for training afforded by the new buildings led immediately to great improvement in the training of the students, while the greatly enlarged accommodation provided in the hospital was reflected in the number of in-patients treated, which rose from 756 in 1914-15 to 1,355 in the year under report. The distance of the new hospital from the city led, however, to a decrease in out-patients, and a scheme was proposed for a municipal dispensary to serve the more distant parts of the town.

166. Seventy new students joined the college, of whom more than half, an unusually high proportion, belonged to the Punjab. Of these 50 had passed the Anglo-Vernacular Middle School examination and 3 the Matriculation examination of the Punjab University. Of 55 students who appeared for the final examination, 49 obtained the diploma, although the standard was considerably higher than it was last year. A post-graduate class was started in October with a class of 4 veterinary graduates, one each from the Provincial Civil Veterinary Department, Baluchistán, Kapúrthala and Kashmír.

Hospitals.

167. No new veterinary dispensaries were opened by local bodies, but the rebuilding of three old dispensaries was completed and various additions were made to existing dispensaries. Several public-spirited Indian gentlemen provided buildings at their own expense. Over 300,000 animals were treated as in-or out-patients, a total more than double that of any other province in India.

PRODUCTION AND DISTRIBUTION.
Miscellaneous.

168. The system of instructing Veterinary Inspectors and Veterinary Assistants was continued on the same lines as during the past two years. Five meetings were held in the Central Punjab circle, and two each in the North and South Punjab. The Chief Superintendent also held a meeting at Dera Gházi Khan. There is no doubt that these meetings did much good and improved considerably the work done by the assistants. Lectures and demonstrations in villages by the department were carried on as before, with marked benefit to the people. During the year nearly 13,000 villages were visited and over 128,000 animals were treated by the travelling members of the staff.

Cattle-breeding.

169. A feature of the year in the history of cattle-breeding, was the establishment of three cattle-breeding farms in the Lower Bari Doab Colony. The management of breeding herds on scientific lines was an entirely new departure for most of the grantees, and in the circumstances the progress made in it during the year was satisfactory. The breeding of sheep from hybrid merino stock continued to gain popularity.

Government Cattle Farm, Hissar.

170. The results of the working of the Cattle Farm at Hissar depend largely on the fodder supply, and the failure of the monsoon had a disastrous effect on its finances. Fodder had to be imported in large quantities and the stock suffered considerably, the number of casualties being greater than in the previous year in spite of the fact that the farm was unusually free from contagious disease. Expenditure rose from Rs. 1,54,070 to Rs. 1,85,416, while receipts declined by over Rs. 8,000 to Rs. 1,01,024. The number of animals of all sorts sold was only 613 as compared with 845 in 1914-15, though 181 bulls were issued to district boards—a number which again beat all previous records.

Camel Specialist.

171. The Camel Specialist continued his important observations and experiments on the treatment of the various diseases to which camels are prone, inspecting in the course of his work the military camel corps, camel fairs, Government camel runs, and camel-breeding villages, and disseminating useful knowledge among the people. The value of the work done is illustrated by the success gained in treating "surra," a disease which alone caused the death of 2,500, or about 12 per cent., of the camels in 13 military camel corps. Out of 158 camels afflicted by this disease in one unit, 129 were saved by the special treatment recommended, representing a saving to Government, at an average value of Rs. 140 per camel, of Rs. 18,060. The cost of the department during the year was Rs. 26,661.

27-A.—Fisheries.

172. The Fishery Regulations have become law in the Mandi and Suket States, in the Kángra district, including the Kulu sub-division, and in that portion of the Hoshiárpur district which lies on the Beas river above Mirthal ferry. Regulations have been drafted for Gurdáspur and fishery conditions in Hoshiárpur, Jullundur and Amritsar districts were investigated.

173. The Chhenáwan *murral* pond suffered considerably in the late monsoon and two of the dams were breached, allowing the fish access to the river. The Mádhopur fish farm was kept under observation. Experiments in breeding carp did not meet with success. Trout fishing in Kulu was thrown open to the public. Trout were found to be breeding naturally, and anglers reported sport in the Beas.

174. Interesting enquiries were made with a view to introducing the manufacture of buttons out of mussel shells. It appeared doubtful whether the quality of the indigenous mussel was such as to promise satisfactory results.

28.—Weather and Crops.

Character of the season.

175. The rainfall during the year ending 31st May 1916 was far below normal throughout the province. The weather was unusually disturbed in the second and third weeks of February 1915 during which the rainfall was above normal in most districts. Widespread and fairly heavy precipitation occurred in the second week of March; but during the rest of the month and throughout April, May and June the rainfall was generally in defect. Autumn sowings were, in consequence, seriously restricted on unirrigated areas. The monsoon never penetrated in full strength into the Punjab with the result that the rainfall in July and August was scanty, occurring merely as sporadic showers at lengthy intervals. This impeded sowings and caused damage to the earlier sown unirrigated crops. During the first 11 days of September the province experienced a spell of abnormally dry weather, but in the latter half of the month the monsoon extended over the greater part of the Punjab. The result was an invigoration of standing crops, except in the Shahpur district and the whole of the Multan division which remained unaffected. The total monsoon rainfall in the province during the season fell short of the normal by as much as 41 per cent.

176. Numerous light falls of rain occurred in most districts during the first week of October, but the whole of November was practically rainless. Light showers in December benefited the sugarcane and spring crops. The rainfall in September left sufficient moisture for spring sowings except in parts of the south-east and west of the province. The first three weeks of January were dry. Light rain fell throughout the Punjab on the 31st of January and in the first two weeks of February, but it was insufficient for unirrigated crops, which had long been suffering from drought. Light or moderate showers in the south-east and the sub-montane tracts in the third week of February did much good. After this the weather remained generally dry till the third week of March when light but fairly general rain again fell. This benefited the standing crops, specially in parts of the Ráwalpindi division, where the fall was good. The total winter rainfall, however, was insufficient for the maturing of the unirrigated crop which suffered everywhere, specially in the south-eastern and south-western districts. The weather in April and May remained generally rainless, and this allowed reaping and threshing of spring crops to be completed without interruption. Thanks to the rainfall in September and October, spring harvest sowings were not so seriously affected by the drought as the sowings of autumn crops. The total sown area was 18 and 8 per cent. less than the area sown in the previous year and the assumed normal sown area, respectively, while owing to insufficiency of the monsoon and the winter rainfall, the total matured area was 31 per cent. and 19 per cent. less than the last year's matured area and the assumed normal matured area, respectively.

The autumn harvest.

177. The area sown for the autumn harvest was 27 per cent. below the area of last year and 23 per cent. below the normal. In addition to seasonal causes, the heavy stocks of cotton left over from the previous crop and the low prices due to contraction in exports led to a decrease of 51 per cent. in the sowings of this crop. Maize, rice and sugarcane did better than other crops. The total matured area fell short of last year's matured area by 35 per cent. The percentages of failures were particularly high in the Ambála and Ráwalpindi divisions where the unirrigated area is important.

The spring harvest.

178. The rainfall in the second half of September and showers in October were sufficient for the sowing of the rabi crop except in parts of the south-east and west where the rain was slight and insufficient. High prices of food-grains stimulated sowings, and the total sown area was only 13 per cent. below the area of last year and 2 per cent. in advance of the normal. The decrease was confined to the unirrigated area only: in the irrigated area there was an increase of 8 per cent. as compared with last

PRODUCTION AND DISTRIBUTION.

year. The winter rainfall, however, was quite insufficient for the maturing of the unirrigated crop. The matured area was 29 per cent. less than last year and 24 per cent. of the sowings failed against 7 per cent. last year.

Chief staples.

179. The area under wheat declined from 9,915,507 acres in 1915 to 8,991,542 acres in 1916, a decrease of 9 per cent., but 5 per cent. better than the normal. The failure of the winter rains told very severely on the crop. The total yield was 2,167,561 tons or, all round, 17 per cent. short of the normal, the shortage of the irrigated crop amounting to 1 per cent. and of the unirrigated to 43 per cent.

The outturn of the other principal crops as compared with the estimated normal outturn is given below :—

Name of crop.	*Outturn in percentage of estimated normal.*
Gram	57
Barley	72
Cotton	53
Jowar	55
Rice	121
Bajra	45
Maize	108
Sugarcane	101
Oilseeds	80

Harvest prices.

180. There were two main factors acting upon prices in the past year the character of the harvest and the war. The former caused a rise in all prices except those of wheat, maize and rape-seed. The most significant increases occurred in the case of cotton and sugarcane. The price of cotton rose from Rs. 4-4-0 in 1914-15 to Rs. 6-9-0 in the past year, and thus all but regained the level of 1913-14. A renewed demand for export combined with the failure of the crop (which yielded only half the normal outturn) to produce this result. The yield of raw sugar was approximately average, but the country depends to a great extent on foreign supplies of sugar and their restriction forced up the price of this product sympathetically from Rs. 4-5-0 to Rs. 5-13-0. The maize harvest was good and its price fell. In the case of wheat and rapeseed a diminished foreign demand and difficulties about freights have caused a fall of 3 and 2 annas per maund, respectively, in the average harvest price.

Trade and stocks.

181. Trade in grain was slack and stocks were sufficient, except in Hissar. Recently the export trade has revived and prices are going up. In the case of "other food-grains" (which consist mainly of maize and barley) and of raw cotton, exports have been heavier than in the preceding year.

29.—Horticulture.

Agri-Horticultural Garden, Lahore.

182. The failure of the monsoon and winter rains, the erratic canal supply, and the disappointing amount of water provided by the tube well, all helped to make the year an unfavourable one for the Lahore Gardens. Progess was made in classification of eucalyptus suitable for growing in the plains. With a view to improving roadside arboriculture in the Province, an arboricultural class was started in the gardens, to which the district boards of Amritsar, Gujránwála, Jhang and Multán sent nominees. All the boys in the three gardening classes made good progress in their work.

30.—Forests.

Alteration in area.

183. The area controlled by the Forest Department was reduced by 441 square miles to 7,796 square miles. The decrease is mainly due to the release of nearly 440 square miles of irrigable land for colonisation

Four hundred and seventy-one acres were transferred to the Irrigation Department and some other minor changes were made. The unclassed forests of the Nadaun, Kutlehr, Dáda Siba and Goler Jagirs, in the Kángra division, were declared protected forests under Chapter IV of the Forest Act. The area under the department at the end of the year consisted of the following classes :—

	Square miles.
Reserved forests	1,791
Protected forests	4,168
Unclassed State forests	1,472
Leased forests	365
Total ...	7,796

184. The settlement of the Kángra jagir forest was completed and an area of 406 acres, acquired for the protection of the Dharmsála Civil Station, was declared to be reserved. Two small areas in the Montgomery district and the Government enclosure at Tera in the Lahore district were under settlement; the former are to be reserved for the browsing of camel corps and the Tera area is to be irrigated with a view to growing firewood for the resin distillery. The settlement of the Chichawatni irrigated plantation in Montgomery district remained incompleted. The revision of the settlement of the Bashahr State forests was begun, much to the satisfaction of the right-holders. Forest Settlements.

185. The rights over trees on waste lands and Government rights over trees on tea estates in Kángra district were the subject of enquiry by Government.

186. A revised plan for the Murree-Kahúta forests of the Ráwalpindi division was sanctioned. The plan provided for more intense treatment of the pine forests, promising a three-fold increase in production. The revision of the Kángra working plan made fair progress; but was delayed by difficulties in the connected scheme necessitating the closure of selected areas. It was decided to review the lines on which the Pabar (Bashahr division) working plan was being prepared, and a combined plan for the Pabar and Nogli ranges was brought under consideration. Schemes for providing browsing areas for the 55th and 56th Silladar Camel Corps were sanctioned, but remained in abeyance pending the return of the corps from active service. Progress was made with similar schemes for six other corps. Working Plans.

187. Preliminary reports for the revision of the working plans for Kulu forests, the Shahdara and Chánga Mánga plantations and Pangi (Chamba State) forests were approved by Government. A plan for the Dharmsála municipal forests was prepared.

188. The number of forest offences reported—10,512—was rather less than the average figure for the three preceding years. The total area of forest burnt was 18,511 acres as compared with 41,578 acres in 1914-15. The fire season was one of the worst on record in the Kulu division, but the Ráwalpindi and Kángra forests escaped a recurrence of the disastrous fires of the previous year. In Kángra increased taxes on nomad flocks reduced the number of these animals by 50,000, and it was decided to impose a tax on the animals of resident owners. A number of forests were opened to grazing to meet the distress arising from prolonged drought, and only 252 square miles remained entirely closed. Protection.

189. Drought hindered considerably the reproduction of trees and growth of coppice shoots in several divisions. The crop of deodar seed was bad, Natural and artificial reproduction.

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that of chir (*Pinus longifolia*) fair, of blue pine, spruce and fir satisfactory. Financial stringency led to the postponement of the sowing of the Khanewal plantation and curtailed operations in the Chichawatni plantation. In the Kot Lakhpat plantation an additional area of 53 acres was stocked with shisham, and in the Phália tahsil of the Gujrát district an area of 7,500 acres was selected for another irrigated plantation. The results of broadcast sowing of eucalyptus in the vicinity of Simla appeared to prove that this tree could only be raised with success in nurseries.

Exploitation.

190. The total outturn of all classes of produce compared favourably in amount with the average of the three preceding years, as the following figures show :—

—	Timber.	Firewood.	Minor produce.
	Cubic feet.	Cubic feet solid.	Rs.
1915-16	9,518,885	29,822,252	24,39,562
Average 1912—1915	6,390,845	20,421,458	23,23,552

More extensive fellings were made and some arrears cleared off in Bashahr, Kulu, Lahore and Ráwalpindi divisions, while the clearance of land for colonisation accounts for most of the increased outturn of firewood. The increase in minor forest produce is due to the collection of more resin and its valuation at Rs. 13 per maund instead of Rs. 8. More than thirteen thousand maunds of resin were collected in the Ráwalpindi chir forests, and, including that already in stock, 19,511 maunds were distilled, yielding 12,169 maunds of résin and 31,445 gallons of turpentine. The introduction of the uniform system of treatment in the chir forests in Ráwalpindi and the deodar forests in Kulu will increase their yield and secure more satisfactory reproduction than has been obtained hitherto.

Miscellaneous.

191. Difficulties in securing the necessary capital in Europe prevented progress in the wood pulp and olive growing industries The orchards maintained in the Kulu Division throve well, the oldest trees coming into bearing for the first time.

Reboisement.

192. Work in connection with the reboisement of the Siwálik Hills was continued, but the failure of the rains resulted in failure of a great part of the sowings. The extension of closures was postponed for financial reasons, as they involved the payment of considerable sums as compensation. Revised rules under the Punjab Act III of 1913, regulating the establishment of timber depôts and the sale of timber in the vicinity of rivers, were brought into force. The first volume of the Punjab Forest Manual was completed.

Financial results.

193. The financial results of the work of the department are given in section 43. The year's working shows a surplus of Rs. 10,55,559, and the cash surplus of Rs. 7,95,229 has only once been exceeded. The prices of all the chief timbers rose considerably, and the market for resin products was very favourable. The price of firewood, on the other hand, fell owing to the flooding of the market with wood cut in areas cleared for colonisation.

31.—Mines and Quarries.

Indian Mines Act.

194. The number of mines worked during 1915 was 29. These consisted of 4 Government salt mines, 14 coal mines (11 in Jhelum, 2 in Shahpur and 1 in Mianwali, of which the mining lease has been recently cancelled on the ground that operations were not in *boná fide* progress to the satisfaction of the Local Government), 10 slate mines (4 in Gurgaon,

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5 in Kangra and 1 in Gurdaspur) and one limestone quarry at Hoshiárpur. No new prospecting licenses for coal were granted.

195. The total amount of minerals raised and its value as compared with 1914 is as follows :—

—	Minerals in tons.		Value in rupees.	
	1915.	1914.	1915.	1914.
			Rs.	Rs.
Salt	154,770	135,517	3,94,986	2,86,701
Coal	59,579	53,774	3,24,533	2,80,419
Slate	7,910	9,169	1,09,926	1,16,445
Limestone	1,100	45	602	80

Excepting as regards slate, there is a slight increase in the outturns as compared with 1914.

Other minerals.

196. The minerals which do not come under the Indian Mines Act are —Gold by washing, petroleum, alum shale, block kankar, limestone, gypsum, antimony ore, building and sandstone. The outturn and value of the minerals recovered during 1915 have been as follows :—

District.	Mineral recovered.	Value.
		Rs.
Ambala, Attock, Jhelum and Mianwali.	Gold, 149·59 ozs.	9,057
Attock	Mineral oil, approximately 250,000 gallons ...	30,000
Mianwali	Petroleum, 1,494 gallons	239
Do.	Alum shale, 7,014 tons	7,865
Ambala	Block kankar, 999 tons	1,958
Jhelum	Limestone, 26,889 tons	20,167
Do.	Gypsum, 773 tons	580
Do.	Antimony ore, 2·06 lbs.	80
Do.	Sandstone, 38,215 tons	45,765
Simla	Building stone, 4,744 tons	1,108

Prospecting Licenses for oil.

197. The total number of prospecting licenses for oil granted during the year was as follows :—

District.	Name of Company.	Total number of licenses.	Area covered.
Attock	Attock Oil Company ...	4	33½ square miles.
Do.	Burma Oil Company... ...	4	16$\frac{1}{16}$ " "
Jhelum	Ditto.	1	3 " "
Do.	Indo-Burma Petroleum, Company Limited, Rangoon.	2	11½ " "

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32.—Manufactures.

198. The number of factories subject to inspection under the Act has declined from 201 to 187, and, of this number, there were at work 163 factories as compared with 197 actually at work during the previous year. The decrease is due to the closing down of some of the cotton ginning factories for two successive seasons as a result of the short cotton crop and the general slackness of the cotton trade during the war; but a contributory cause of this decrease in the number of registered factories is that many were exempted from the Act as a result of not employing more than 50 persons simultaneously on any one day. Of the 163 factories working, 85 factories were inspected once, 41 twice, 17 three times and 6 more than three times. On the whole, the water-supply is sufficient and satisfactory in practically all factories: the general sanitary conditions show a steady improvement and are now much above the Indian standard of cleanliness. The general lighting and ventilation arrangements are steadily improving, except that in spinning mills the ventilation is still not very satisfactory.

199. The average daily number of employees in all the factories in question was 29,720 compared with a total number of 31,243 last year: the figures for adult females and child workers being 3,098 and 1,104, compared with 3,749 and 1,132 in the previous year. There has been no dearth of labour in the case of cotton ginning factories; owing to the high prices of food stuffs, poverty-stricken coolies have been only too willing to accept the low wages offered them. In engineering workshops wages are slightly on the up-grade, while owing to the munition work there was a large demand for good lathe turners. A coolie generally gets from Re. 0-6-0 to Re. 0-10-0 per day. In ginning factories, the rate of wages is Re. 0-4-0 to Re. 0-6-0 in the case of men, and Re. 0-3-0 to Re. 0-5-0 in the case of women: children get from Re. 0-2-0 to Re. 0-4-0. The employees in factories are generally healthy. The numbers of women and children employed show a decrease owing to the poor cotton season, and of the 3,000 and 1,000 women and children respectively shown as working, the majority of them work in sorting and cleaning cotton in places not containing any machinery. Nearly six hundred children's certificates of age and fitness were granted.

200. There were in all 195 accidents (6 fatal) as compared with 227 last year. There is a decrease under fatal and serious accidents, and the average number of accidents of all sorts per 100 operatives ·65 is the lowest figure touched in the last ten years. As in the previous year, none of the prosecutions instituted failed. It is particularly satisfactory to find that sanitary reforms and improvements in the fencing of machinery have in the main been introduced with the co-operation of owners and without resort to the penal sections of the Act.

33.—Trade.

Internal rail and river-borne trade.

Harvests.

201. This report deals with the triennium ending 1915-16. The trade figures under review relate to the spring and autumn harvests of 1913, 1914 and 1915. The spring crop of 1913 was average, that of 1914 was below normal, while in 1915 the harvest was good. The autumn crop of 1913 was above normal, except in the south-eastern dry area. The cotton crop of this year was a record one. The kharif of 1914 was above normal; that of 1915 was checquered. Harvests were good on the whole.

Prices.

202. During the first half of the triennium under report, prices were affected by the famine in the United Provinces and scarcity in the adjoining south-eastern districts of the Punjab, and during the second half, by conditions brought about by the war.

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Volume of trade.

203. The following table gives the totals of trade exclusive of animals and treasure during the last two triennia :—

—		Exports.		Imports.	
		Maunds.	Value.	Maunds.	Value.
			Rs.		Rs.
1910—13 ...	Total	171,895,435	85,09,39,468	165,168,460	88,40,49,433
	Average	57,298,478	28,36,46,489	55,056,153	29,46,83,144
1913—16 ...	Total	162,885,474	92,97,84,594	189,075,904	96,45,04,993
	Average	54,295,158	30,99,28,198	63,025,301	32,15,01,664

The development of trade has been hampered by the banking crisis of 1913-14 and by the war, but, nowithstanding, the total volume is larger than before. The balance of trade is slightly against the Province. The exports are mainly grain and raw materials, while the imports consist principally of merchandise. In the years 1912-13 and 1913-14 the value of exports exceeded that of imports, but the war has caused a set-back and there was a heavy drop in the volume and value of exports in 1914-15 with only a partial recovery in 1915-16. The import trade, on the other hand, has been fairly well maintained in extent, and its value has increased.

204. The statistics of exports emphasize the fact that the Punjab is essentially, indeed almost entirely, an agricultural province. The only manufactured article exported in any appreciable quantity is Indian woollen piece-goods. All other manufactures are imported. Exports consist of grain and pulse, raw cotton, raw wool, Indian woollen goods, hides and skins, leather, rape and mustard seed, linseed, salt and saltpetre. The Punjab has on the balance been importing jowar and bajra, rice, cotton seed, sesamum, fodder, ghi and unrefined sugar. In the past triennium, grains and pulses have formed 54 per cent. of the total exports having regard to value. Exports.

205. Usually, the exports of wheat follow closely the character of the preceding harvest, but unnatural conditions prevailed in 1915-16 owing to the want of freight and the restrictions on export involved in the Government wheat scheme. The famine in the United Provinces in 1913-14 and then the heavy requirements of the Army have led to increased exports of gram and pulse which were facilitated by the bumper crop of 1915. The outbreak of the war diminished very seriously the market for raw cotton, much of which was taken previously by Austria and Germany. A growing demand from Japan, however, has helped to retrieve the situation. The oilseed trade is another branch that has suffered from the war, and in 1914-15 exports fell to less than a quarter of their previous volume. On the other hand, the exports of wool and woollen goods have increased under the stimulus of the demand for Military purposes, while the imports have diminished. Woollen goods are among the few important manufactures of the Punjab, and the total value of the Indian woollen goods exported has increased steadily from $2\frac{1}{2}$ lakhs in 1908-09 to $23\frac{1}{3}$ lakhs in 1915-16. The popularity of Khewra salt in other provinces appears to be increasing, and exports rose by 8 lakhs of maunds in the last triennium. The net export of leather has risen over 21 per cent. in the last triennium. The war has caused a significant increase in the export of saltpetre.

206. The net imports of coal and coke for railway purposes increased by 73 lakhs of maunds in weight and Rs. 65 lakhs in value owing to the Imports.

PRODUCTION AND DISTRIBUTION.

opening of new railway branches in the Punjab. Unfortunately there has been a fall of over 19 *lakhs* of maunds in the import of coal and coke for other purposes, while the price of the coal imported has greatly increased. The reason for this fall is to be found partly in the shortage of rolling stock and partly in the shock sustained by industries owing to the failures of banks. The import of cotton piece-goods of foreign manufacture increased steadily throughout the previous triennium, and the first year of the last triennium, indicating a steady rise in the standard of comfort among the people. The war dealt a blow to the trade in 1914-15, and though a recovery occurred in 1915-16, imports were still below the level of 1911-12. Indian factories have reaped the benefit. For long they supplied about 5½ *lakhs* of maunds to the Punjab annually, but in 1915-16 the figures advanced to 6¾ *lakhs* and the total amount of piece-goods, foreign and Indian, imported in 1915-16 formed a record. Scarcity at different times in the United Provinces, or in the south-east of this province, has resulted in variations in imports of jowar, bajra and fodder.

River-borne trade.

207. The volume of imports by the river Indus remained very steady throughout the last six years till 1915-16 when a drop of 11 per cent. occurred. The export trade is not so steady. It has fallen in weight by 12 per cent., but has increased in value in the last three years.

Treasure.

208. The imports of treasure increased rapidly during the *triennium*, though in the latter half silver has replaced gold to a marked extent. The increase in imports is due in part to the demand for coin when the war first started, but it also connotes growing prosperity.

Distribution of trade.

209. Karachi is still the best customer of the Punjab, but its share of the exports has fallen from 61 per cent. in 1912-13 to 42 per cent. in the last two years. The war is mainly responsible for the decrease, but the famine in the United Provinces in 1913-14 also effected a change, diverting large quantities of food-grains. Bombay and Rajpútána follow in importance among our customers. Imports come mainly from Karáchi, but the large imports of jowar, bajra and fodder in the last two years, owing to the scarcity prevailing in the south-eastern districts of the Punjab, have given the United Provinces a place but little behind it. Bombay and then Calcutta are the next most important sources of supply for the Punjab. The only noteworthy point in the distribution of trade among the internal blocks of the province is the increasing importance of the cis-Sutlej Territory both in imports and exports. It has been a large importer of fodder and the inferior food-grains in recent years, and, except in regard to wheat, it is pre-eminent in the export of all grains, oil-seeds and spices. Wheat comes mainly from the territory between the Sutlej and Jhelum. These two blocks between them take three-quarters of the imports and are responsible for 85 per cent. of the exports of the province.

TRANS-FRONTIER TRADE.

General.

210. An important change in the system of registration initiated during the triennial period from 1913-14 to 1915-16 resulted in the inclusion in the statistics of a considerable volume of trade with Central Asia which had not been previously recorded, and this fact is the main explanation of the expansion of the total volume of that trade from 11 *lakks* in the previous triennium to 77 *lakhs* in the period now reported upon. On the whole, however, the statistics indicate a steady expansion, both of import and of export trade, and a definite turn of the balance in favour of the Punjab. The value of the imports for the last three years amounted to 43·8 *lakhs* against 17·7 *lakhs* and 13·4 *lakhs* in the two preceding triennia, the corresponding figures for exports being 49·7 *lakhs* as compared with 8·2 *lakhs* and 4·8 *lakhs*. This expansion was checked to some extent by the outbreak of war and the consequent dislocation of trade, but later exhibited distinct signs of revival. The net imports of treasure recorded in the last triennium amounted to 2·40 *lakhs* while in the previous period there was an export of over 2 *lakhs*.

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Afghanistan.

211. In the case of Afghánistán the weight of exports from India decreased though their actual value rose, a result in which the great enhancement in the price obtained for rice (from Rs. 5 to Rs. 9-4-0 per maund), was the main factor. The trade in piece-goods of Indian manufacture shewed a sudden and remarkable increase of more than 3½ *lakhs* during the last year under report, for which the stoppage of European products owing to the war was no doubt greatly responsible. The trade in green tea which gave promise of some importance in previous years ceased suddenly in 1915-16, probably owing to its diversion to the railway route. In all the principal articles of import there was a falling off during the last triennium, partly owing to the poor fruit season in 1914-15, partly to the opening of the railway to Quetta, which diverted some of the trade, and partly to the restrictions placed on the export of certain commodities in Afghánistán.

Central Asia.

212. The present system of registering Central Asian trade dates from April 1913. The trade in *charas* expanded from 2,871 maunds in 1911-12 to 4,474 maunds in 1915-16 when there was a rush to anticipate the increase of duty which came into force in April 1916. The closing of the Russian bank at Káshgar led the traders to use silk to pay their debts in the Punjab and nearly 5½ *lakhs* worth of the raw article was brought in last year. The cessation of the Haj pilgrimage so far as Central Asiatics are concerned practically extinguished the trade in manufactured silks. The high prices obtainable in India for dye stuffs resulted in the re-importation of 30 maunds of paints and colours exported before the war.

213. In the case of exports there was a decline in the past year in all the important staples, except Indian piece-goods, petroleum, sugar and green tea. The export of European piece-goods steadily diminished throughout the triennium owing to the war, while Indian piece-goods more than maintained their level. In the case of silks also Indian manufacturers seized their opportunity while Germany was out of the market. The difficulty of remitting money owing to the closing of the Russian Bank at Káshgar is blamed for the fall in the export of skins. The trade in unmanufactured leather varied throughout the triennum, but remained fairly strong at its close, while exports of manufactured leather, though small, steadily increased, and the trade is said to have been profitable. Petroleum also offers profitable trade, which increased rapidly during the last three years. For several years past the trade in refined sugar has been decreasing, while there has been a considerable increase in the exports of unrefined sugar, probably the Indian variety. The rising price of the refined article militates against its popularity. The export of Indian tea was little more than half that of 1913-14—the result, no doubt, of a rise in price from Rs. 25 to Rs. 42 per maund in the past three years. The export of China tea, on the other hand, nearly doubled in the last year, as the difference between its price and that of Indian tea grew less. In the declining exports of woollen goods the effects of the war are once more apparent. Mills were too busy with Government contracts to do much work for other markets. The value of exports to Central Asia during the triennium exceeded the value of imports from that territory by Rs. 14,50,142. The balance was partially liquidated by a net import of treasure to the value of Rs. 3,36,549, including Russian paper money. This has depreciated in the Punjab by about 15 per cent. of its face value and the amount imported last year was insignificant.

Trade with Chinese Tibet.

214. The balance of trade with Tibet is still largely against India. The trade in borax diminished steadily. In the year, 1907—1910 as much as 6,556 maunds were imported. In the last three years only 2,081 maunds passed the registration posts. It is a far cry from America to Tibet, but according to the report of the Director of Commercial Intelligence the discovery of calcium borate in America is probably responsible for the diminution of imports from Tibet. Salt is to a great extent used as an

article of barter in exchange for grain, and its import is affected by the amount of grain available for export. The chief import from Tibet is raw wool. During the past three years the trade in this commodity remained fairly steady, and the total imports showed a constant and considerable increase throughout the last triennial periods.

215. The war was responsible for a fall in the export trade in European cotton piece-goods, which were to some extent replaced by those of Indian manufacture. High prices restricted the exports of grain, while the stoppage of supplies from Central Europe was the chief cause of a heavy fall in the export of refined and unrefined sugar.

Joint Stock Companies.

216. The number of registered companies with share capital continues to decrease, and only 77 remained active during the year; others are under liquidation or are being struck off. The indigenous companies are rapidly disappearing leaving as survivors those under British and sound Indian control. The capital invested is diminishing, the sum paid up is Rs. 2,98,260 less than last year. Promoters of new concerns shew a preference for registration as private companies which are exempt from the necessity of employing certificated auditors.

217. The local Insurance and Provident Insurance Companies continue to decline in number. The small indigenous companies continue to disregard generally the provisions of the Indian Companies Act and where warnings fail, prosecutions have to be instituted.

34.—Buildings and Roads.

Total expenditure.

218. The total outlay on Public Works in the Buildings and Roads Branch amounted to 68½ *lakhs*. The reduction of last year's figure by 14½ *lakhs* was mainly due to economy in view of the war.

Imperial Civil Works.

219. The expenditure on original Imperial Civil Works was Rs. 1,23,000, and Rs. 45,000 were spent on repairs. A residence and an office for the Camel Specialist were completed at Soháwa, the total cost of which was Rs. 20,250.

Imperial Military Works.

220. Only Rs. 6,000 were spent on original Military Works, the cost of repairs amounting to Rs. 29,000.

Provincial Civil Works.

221. The department spent on original Provincial Civil Works Rs. 23,38,000 and Rs. 18,11,000 on repairs. The King Edward Memorial at Lahore was opened by the Viceroy on December 10th, 1915. The completion of the scheme will provide the capital of the Province with an exceptionally complete system of buildings for hospital treatment, medical education, and original research. On the same day the Viceroy opened the Veterinary College at Lahore built at a cost of Rs. 6,55,000.

Sanitary Works.

222. The completion reports of the Simla hydro-electric schemes reported a total outlay of Rs. 19,07,000. The electric lighting scheme underwent its first extension of 500 kilowatts. The financial returns of the electricity department exhibited most encouraging results, and the Simla Municipality is to be congratulated on possessing such a satisfactory investment. Financial stringency forbade progress with the schemes recommended by the Simla Improvement Committee of 1914. The tube well water supply at Siálkot was formally inaugurated by the Lieutenant-Governor and made over to the Municipality for maintenance. Its success fully justified this new departure in large water supply schemes. The extension of the Lyallpur water-supply was begun by the addition of two filter beds which were urgently required. Drainage schemes were in hand at Majítha in Amritsar District, Ráwalpindi, Wazírabad and at Tandliánwála in Lyallpur District.

Civil buildings.

223. The alterations and extensions to Government House, Lahore, referred to in last year's report, were completed with minor exceptions.

Roads were aligned and trees planted on the site acquired last year at Lahore for houses for Government officials.

The Consulting Architect's scheme for the replanning of "Charing Cross," in Lahore, began to materialise. With the attainment of its object the administrative centre of Lahore will, it is hoped, assume a dignity worthy of the capital of the Province. War expenses postponed the supply of electricity to work the grain elevator at Lyallpur, the construction of which was completed. An agricultural station was under construction during the year at Hánsi, and quarters were built for the Assistant Professor of Botany at the Lyallpur Agricultural College.

Communications.

224. Work was in progress on a masonry bridge over the Dodni nullah on the Hoshiárpur-Dharmsála road. On the Hindustán-Tibet road a bridge thrown over the Shiassu river to place a steel wire rope crossing will save Kanáwari traders a long detour. Other works in this district include a steel truss bridge over the Machada stream near Rámpur, and a tubular truss of novel design over the Nogli river on the Upper Forest road near Taklech. Altogether Rs. 2,82,000 were spent on new works and 13 *lakhs* on the repair of existing communications.

Educational.

225. The physical laboratory for Government College, a companion building to the recently finished biological laboratory, was nearly completed. The high schools with boarding-houses at Lyallpur, Siálkot, Gujránwála, Gurdáspur and Hoshiárpur were finished. Expenditure on educational works during the year amounted to 6 *lakhs*.

Police.

226. Work for the Police Department absorbed Rs. 2,36,000 and included quarters at Lahore Cantonment for European Police Inspectors and police stations in ten towns.

Medical.

227. Extensive improvements to the Walker Hospital at Simla were completed at a cost of Rs. 1,38,000, and the buildings are now up to date and efficient. Funds for the new approach road which greatly improves the access to the hospital were generously provided by Sir James Walker.

Contribution works.

228. Satisfactory progress was made with the extension of the Punjab University Library at Lahore which was rearranged and re-catalogued on modern lines.

Establishment.

229. The Buildings and Roads Branch has contributed a very large proportion of its officers to war service. The sanctioned strength is 43 officers, and out of these 5 Royal Engineer Officers are on military duty, 5 Imperial Civil Engineer Officers are serving in the Indian Army Reserve, and 2 Imperial Civil Engineer officers are at the disposal of the War Office.

34-A.—Railways.

230. The Jullundur City to Tánda-Urmar section of the Jullundur Mukerián Railway was opened to traffic in June 1915, and the Tánda-Urmar to Mukerián section in the following October. The Mandra-Bhon line and the Siálkot-Nárowál line were opened in February 1916, adding 129 miles of 5-feet 6-inch gauge railway to the Province.

231. At the end of the year there were 4,398 miles of railway in the Province. Of this total the State owned 2,841 miles and worked 3,748 miles, and companies owned 1,286 and worked 588 miles. Native States owned 271 miles, of which they worked 62 and the State 209 miles.

35.—Irrigation.

General.

232. During the year the direct receipts amounted to Rs. 2,47,97,985 and the expenditure to Rs. 1,64,79,374 as against Rs. 2,55,74,433 and Rs. 1,99,42,412, the average of the previous triennium. The expenditure, as divided between Capital and Working Expenses, was Rs. 47,23,095 and Rs. 1,17,56,279, respectively; the former included Rs. 41,18,752 expended on the construction of the Triple Canals. The indirect revenue credited to the canals amounted to Rs. 1,17,60,597 as against Rs. 1,03,80,159, the average of the triennial period ending 1914-15.

233. The total area irrigated by works of all kinds and the area matured was 8,884,811 and 8,448,987 acres, respectively, showing a decrease of 78,230 and 158,778 acres, respectively, over the figures of 1914-15. The figures, however, give an increase of 269,053 and 228,457 acres, respectively, over the average of the previous triennium, due to the development of irrigation on the Upper Chenab and Lower Bari Doab Canals. But excluding the triple canals the decrease in the area irrigated and area matured comes to 285,500 and 334,849 acres, respectively, as compared with the figures of the previous year, mainly due to the very unfavourable season caused by the almost total failure of the monsoon.

234. The financial results of the operations of canals classed as Productive Major Works and the area irrigated by each is shown in the following statement :—

1	2	3	4	5	6	
					Percentage of profit on the Capital Outlay.	
Name of Canal.	Area irrigated.	Gross income.	Working expenses.	Net income	Excluding interest charges.	Including interest charges.
	Acres.	Rs.	Rs.	Rs.		
Western Jumna ...	825,083	30,06,351	14,05,414	16,00,937	9·04	5·73
Sirhind	1,507,067	32,27,340	12,38,858	19,88,482	7·78	4·47
Upper Bari Doab ...	1,145,234	47,18,969	13,72,565	33,46,404	15·29	11·97
Lower Bari Doab ...	283,294	5,53,497	6,50,985	—97,488	—0·46	—3·79
Upper Chenab ...	325,062	10,17,333	8,33,808	1,83,525	0·53	—2·79
Lower Chenab ...	2,284,079	1,59,22,240	32,71,993	1,26,50,247	39·78	36·40
Upper Jhelum ...	...	6,234	3,42,150	—3,35,916	—0·79	—4·12
Lower Jhelum ...	834,176	41,21,783	8,17,859	33,03,924	20·70	17·37
Upper Sutlej Inundation Canals.	272,746	7,46,103	4,09,708	3,36,395	18·50	15·23
Sidhnai	270,150	8,32,779	1,46,592	6,86,187	51·55	48·18
Indus Inundation Canals	235,641	4,37,175	4,41,584	—4,409	—0·14	—3·44
Total ...	7,982,532	3,45,89,804	1,09,31,516	2,36,58,288	10·90	7·59

235. The Upper Jhelum Canal, the final link of the Triple Canal Project, was opened for irrigation on the 7th October 1915. Thus the year saw the completion of the great Triple Project, and the ceremony to celebrate this completion was performed at Mangla, the Headworks of the Upper Jhelum Canal, on the 9th December 1915, by His Excellency Lord Hardinge of Penshurst, the late Viceroy.

236. The total cost of all the Productive or Major Irrigation Works in operation at the end of the year 1915-16 was Rs. 23,24,13,967 including Rs. 1,54,62,483 contributed by Native States. The total outlay on the Triple Canal Project was Rs. 9,79,44,704, *viz.*, Rs. 4,23,61,119 on the Upper Jhelum, Rs. 3,45,01,593 on the Upper Chenab and Rs. 2,10,81,992 on the Lower Bari Doab Canal.

The net revenue earned was Rs. 2,36,58,288, giving a profit of Rs. 10·90 per cent. on the capital invested (Rs. 21,69,51,484). Excluding the Triple Canals, which, though opened, were not working properly, the percentage comes to 20.

237. On all the Imperial Minor Canals which are not classed as Productive, including the canals for which capital accounts are kept, the net revenue earned amounted to Rs. 9,44,305 as against Rs. 9,47,214 in 1914-15.

There were only two Provincial Canals in operation, *viz.*, the Shahpur Provincial Canals and the Ravi Inundation Canals; the latter now cease to exist as the area commanded by these canals has been brought under the command of the Upper Chenab and Lower Bari Doab Canals. The net revenue on these canals was—Rs. 5,707.

The details for each canal are given below :—

Maior Works Canals in operation.

Western Jumna Canal.

238. The area irrigated was a distinct improvement on previous years, due to the recent improvements in channels and the scientific designing of them; the gross revenue collected during the year was Rs. 30,06,351, or Rs. 2,28,775 less than the average for the triennium ending 1914-15. Working expenses were Rs. 1,09,614 more than the average of the previous triennium owing to heavy expenditure on silting reaches and improvements to banks of channels and clearance of drains recently taken over from the Civil Department.

A temporary Division was formed for 6 months to work up the projects for (*a*) a high dam across the Jumna at Koch, proposals for which were finally abandoned by the Government of India as suitable foundations could not be found, and (*b*) Remodelling works at Dadupur and Tajewala, proposals and estimates for which are under consideration.

Sirhind Canal.

239. The gross area for the year was the second best on record, the highest being in the year 1911-12, when 1,609,458 acres were irrigated followed by 1,476,782 acres in 1912-13. The area for the year was in excess of either of the two previous triennia. As compared with the figures of the previous year the kharif area was 9·6 per cent. short, whereas the rabi area was 38·15 per cent. in excess. The net revenue earned by the British branches amounted to Rs. 19,88,482 or 7·78 per cent. on the capital invested. The result compares unfavourably with the figures of the previous year, owing mainly to a very poor rabi area of 1914-15, which was the lowest since 1910-11, and to an uncollected balance of Rs. 1,35,496.

Upper Bari Doab Canal.

240. The area irrigated was 1,145,234 or 16,713 acres less than the average of the previous triennium. It was, however, an improvement over the average of the triennial period ending 1911-12. In spite of the failure of the monsoon and the almost total absence of winter rains the agricultural conditions were fairly satisfactory. Owing to absence of rain during rabi, the straw was short, but the grain outturn was better

than might have been expected and the year was, on the whole, a prosperous one for the cultivators. The net income amounted to Rs. 33,46,404 or 15·29 per cent. on the capital invested against 13·65 per cent. of the previous year.

Lower Bari Doab Canal.

241. The gross receipts amounted to Rs. 5,53,497 and the working expenses to Rs. 6,50,985, resulting in a deficit of Rs. 97,488 against a net revenue of Rs. 1,67,844 in 1914-15. This result was due to a heavy expenditure incurred on the staunching of channels in leaky places. In October 1915 the 1st Division of this canal, hitherto purely a constructive division, was converted into a revenue one. The working of this canal is not yet fully established as the Upper Jhelum Canal, which was opened in December 1915 is not yet able to carry the full supply intended.

Upper Chenab Canal.

242. The expansion of irrigation has been steady but not so rapid as anticipated in the project forecast in which it was expected that an area of 500,000 acres would be irrigated in 1915-16; this failure to rise to expectations was largely due to the unforeseen delay in opening the Upper Jhelum Canal.

Lower Chenab Canal.

243. Compared with the figures of 1914-15 the area irrigated was short by 28,134 acres, but it exceeded the figures of either of the two previous triennia. The net revenue amounted to Rs. 1,26,50,247 or 39·78 per cent. on the capital outlay against Rs. 1,32,53,785 or 41·81 per cent. in the previous year. The year was abnormally dry in both crop seasons and this resulted in a shortage in kharif area and necessitated special remissions in the rabi. The increased expenditure on the improvement of the right bank defence work at Khanki also accounted for part of the decrease in net revenue.

Upper Jhelum Canal.

244. This canal was opened for irrigation on the 7th October 1915. A revenue account was opened during the year. The receipts amounted to Rs. 6,234 and the expenditure to Rs. 3.42,150 showing a deficit of Rs. 3,35,916 as against the project anticipated revenue of Rs. 2,22,500. The reason for this deficit was that no irrigation was done during the year and the above receipts were from rent of buildings and some other miscellaneous sources.

Lower Jhelum Canal.

245. As compared with the previous year the area irrigated during kharif was less whereas that irrigated in rabi was more. The decrease was due to the exceptionally hot dry weather, to insect pest and to disease, while the increase was attributed to the failure of the winter rains, whereby the area that was sown *barani* had to be matured by the canal. The return of 20·70 per cent. on the Capital Outlay was about 1 per cent. less than in the preceding year, due to remissions of about one lakh of rupees on account of failure of cotton in kharif 1915.

A Project Division was formed on 27th June 1916 for the purpose of remodelling the Canal and its distributaries so as to take advantage of any gain of command that has occurred through the gradual silting processes that have been going on since the canal was opened and to secure uniformity of action and progress in the very important work of bringing the outlet system up to modern requirements.

Upper Sutlej Inundation Canals.

246. The net area assessed exceeded by 174 acres the average of the triennium ending 1911-12, while it was short by 70,432 acres as compared with the average of the previous triennium. Excluding, however, the record year of 1914-15, the figure is less by 22,000 acres than the average of the 10 previous years. Considering that the year under review was one of extreme drought, the result should be considered satisfactory. The net revenue of Rs. 3,36,395 gives a return of 18·50 per cent. on the capital invested. It was 14·59 per cent. in 1914-15.

Sidhnai Canals.

247. The results of the working of these canals were eminently satisfactory. Figures of irrigation showed some reduction on those of the preceding year which was an exceptional one. The rabi area was remarkably good in view of the very small amount of rainfall.

Indus Inundation Canals.

248. The decrease in kharif was attributed to a paucity of supply in some of the canals owing to a low river and absence of heavy floods. This decrease was partly made good by the rabi area which is the second largest on record. The financial results are again disappointing, mainly due to the fact that the heads of these canals require constant changes and heavy maintenance charges.

249. The following table exhibits the financial results of the operations of Imperial and Provincial Canals and the area irrigated by each :—

1	2	3	4	5
Name of Canal.	Area irrigated.	Gross income.	Working Expenses.	Net income.
	Acres.	Rs.	Rs.	Rs.
Shahpur Canal (Imperial)	26,759	92,201	52,887	39,314
Ghaggar Canals	25,174	17,540	36,013	—18,473
Lower Sutlej Inundation Canals ...	283,572	6,21,610	2,85,454	3,36,156
Chenab Inundation Canals	170,485	4,71,364	1,72,292	2,99,072
Muzaffargarh Inundation Canals ...	377,395	6,46,213	3,57,977	2,88,236
Shahpur Canals (Provincial)	18,894	36,359	40,953	—4,594
Total ...	902,279	18,85,287	9,45,576	9,39,711

Shahpur (Imperial) Inundation Canals.

250. The area matured was 23,047 acres as against 40,953 acres, the average of the previous triennium, the decrease being due to unfavourable rainfall and to the inadequate river supply, as well as to the heads of the Eastern and Western Station Canals not being worked satisfactorily on account of a change in the position of the river during flood and consequent silting up of the feeding creek.

Ghaggar Canals.

251. Including the *paleve* area (7,198 acres) which was watered but not sown and on which no water-rates were charged, the total area irrigated was 32,372 acres. As remarked last year these canals receive no credit for any fluctuating revenue up to Rs. 37,000 and the method of accounting always shows a loss in working.

Imperial Minor Works with Revenue Accounts only.

Lower Sutlej Inundation Canals.

252. The area irrigated, though less than that of the preceding year, was greater than in any of the years 1909-10 to 1913-14.

Chenab Inundation Canals.

253. The area irrigated was below the average. This was due to low supplies in the river and to absence of rain. The total yield of wheat was better than in the previous year, though the area was less.

Muzaffargarh Inundation Canals.

254. Notwithstanding the abnormally low rivers and absence of high floods a good steady supply was maintained in all the Canals except the Ganesh (from the Chenab) and the Suleman (from the Indus). The failure of the former was due to the silting of the feeder, whereas that of the latter was due to the supply being short at the beginning of the season owing to heavy erosion and consequent shoaling of the feeder.

PRODUCTION AND DISTRIBUTION.

Although the area irrigated fell short of that in 1914-15, the area matured was greater. The percentage of area failed was lower, *viz.*, 6·7 per cent. against 14·0 per cent. of the preceding year and 10·4 per cent. of the previous triennium. The area irrigated during the rabi was the highest on record.

Shahpur (Provincial) Inundation Canals.

255. The year's working showed a loss of Rs. 4,594 due to lack of supply and rainfall.

Ravi Inundation Canals.

256. Last year it was stated that the only canal doing irrigation as an Inundation Canal under this system was the Jherku Canal in the Montgomery District. This year that canal also was excluded from the operations of the Punjab Minor Canals Act and the area was transferred to the Lower Bari Doab Canal. Thus the Ravi Inundation Canals now cease to exist.

CHAPTER V.

REVENUE AND FINANCE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Land Revenue.— Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1915.

Canal Revenue.—Administration Report of the Irrigation Department, Punjab, for the year 1915-16.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1915-16.

Stamps.—Note on the Administration of the Stamp Department of the Punjab for the year 1915-16.

Income-Tax.—Report on the Income-Tax Administration of the Punjab during the year 1915-16.

Forests.—Progress Report of Forest Administration in the Punjab for 1915-16.

Provincial Revenues.—Audit and Appropriation Report on the Accounts of the Punjab for 1915-16 and Financial Statement published in the *Punjab Gazette*, Part V, of 24th March 1916.

Local Funds.—Report on the Administration and Accounts of the District Boards in the Punjab for the year 1915-16.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1915-16.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical Abstract for British India, Volume I—Commercial Statistics.
Volume II—Financial Statistics.
Volume IV—Administrative and Judicial (including area, population and local funds).

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1915-16.

36.—Gross Revenue and Expenditure.

257. The following table shows the receipts under the various heads of revenue in the year under report :—

MAJOR HEADS.	Imperial. Rs. 1,000.	Provincial. Rs. 1,000.	Total. Rs. 1,000.	± On figures for 1914-15. Rs. 1,000.
Land Revenue	1,39,88	1,39,89	2,79,77	−480
Opium	6,16	...	6,16	+1
Salt	46,15	...	46,15	−64
Stamp	29,05	29,06	58,11	+3,73
Excise	35,30	35,30	70,60	+1,39
Provincial rates	...	31	31	−8
Customs	8	...	8	+2
Income-tax	9,28	9,28	18,56	+68
Forest	...	17,27	17,27	+2,89
Registration	...	3,56	3,56	+3
Tributes	1,45	...	1,45	+1
Interest	2,27	2,46	4,73	+1,92
Law and Justice—Courts of Law ...	...	5,68	5,68	−20
Law and Justice—Jails	...	4,44	4,44	+35
Police	...	1,99	1,99	+26
Education	...	4,91	4,91	+14
Medical	...	78	78	−8
Agriculture	...	2,27	2,27	+54
Scientific and Miscellaneous Departments	...	27	27	+20
Receipts in aid of superannuation ...	1,19	1,02	2,21	+23
Stationery and Printing	53	82	1,35	−23
Miscellaneous	3,20	4,30	7,50	+2,70
Irrigation—Major Works	1,72,99	1,72,98	3,45,97	+25
Irrigation—Minor Works	8,90	67	9,57	−25
Civil Works	82	3,61	4,43	−64
Total	4,57,25	4,40,87	8,98,12	+8,43

258. The gross expenditure, excluding expenditure of the Military, Railways, Post Office and Telegraph Departments and capital expenditure on canals was as follows :—

MAJOR HEADS.	Imperial. Rs. 1,000.	Provincial. Rs. 1,000.	Total. Rs. 1,000.	± on figures for 1914-15. Rs. 1,000.
Refunds	84	87	1,71	+ 27
Assignments	53	33	86	+ 10
Land Revenue	...	49,47	49,47	+ 40
Salt	5.16	...	5,16	— 41
Stamps	89	89	1,78	— 7
Excise	1,13	1,13	2,26	— 11
Income-Tax	6	6	12	+ 1
Forests	...	9,24	9,24	— 35
Registration	...	1,26	1,26	— 4
Interest	1,47	2,01	3.48	— 36
General Administration	4,39	12,41	16,80	+1,05
Law and Justice—Courts of Law ...	...	47,44	47,44	—1,41
Ditto Jails	...	17,94	17.94	—2,08
Police	...	64,25	64,25	—1,76
Education	...	44,10	44.10	—1,90
Ecclesiastical	2,61	...	2.61	— 15
Medical	...	19,66	19.66	+8,57
Political	6,22	...	6.22	+ 2
Agriculture	27	11,83	12,10	— 24
Scientific and Miscellaneous Departments	...	1,39	1.39	— 38
Pensions, Territorial and Political ...	2,24	...	2.24	—1,51
Superannuation	3	23,15	23,18	— 54
Stationery and Printing	31	7,65	7,96	+ 4
Miscellaneous	67	3,67	4,34	+1,75
Famine Relief	6,89	1,58	8,47	— 6,50
Reduction or avoidance of debt ...	...	1,40	1,40	...
Irrigation, Major Works	87,94	87,95	1,75,89	—17,13
Ditto Minor Works	9.12	2,03	11,15	+ 64
Civil Works	3,98	65,47	69,45	+27,83
Total ...	1,34,75	4,77,18	6,11,93	+5,74

37.—Land Revenue.

259. As explained in paragraph 497 of the Administration Report for 1911-12 the land revenue as given in the Land Revenue *Report* is that for the agricultural year ending 30th September, six months preceding the end of the financial year, so there must always be a difference in the total collections as calculated by the Treasury and by the Financial Commissioners' Office in their yearly returns.

260. The Land Revenue Report for the year ending 30th September 1915 shows the following figures for collections including those on account of previous years, comments on which have already been made in section 10 dealing with demands :—

	Rs.
Fixed Land Revenue	2,22,07,367
Fluctuating Land Revenue	1,28,48,849
Temporarily excluded from fixed Land Revenue Roll.	7,31,082
Other Land Revenue	41,91,257
Total ...	3,99,78,555

38.—Irrigation.

Irrigation.

261. The total capital invested up to the end of 1915-16 on canals in operation classed as Productive Major Works was Rs. 21,69,51,484; figures for the Upper Jhelum Canal are for the first time included. Capital expenditure during the year amounted to Rs. 48,20,339. The income from all sources, excluding refunds, was Rs. 3,46,89,804. Working expenses totalled Rs. 1,09,31,516. Interest charges amounted to Rs. 72,37,023. The net profit left was Rs. 1,64,00,000 as against Rs. 1,94,00,000 in the previous year.

262. The balance profit on Imperial Canals, Minor Works, not classed as Productive, was Rs. 9,44,305 as against Rs. 9,47,214 in 1914-15. Provincial Canals show a deficit of Rs. 5,707 as against a profit of Rs. 26,215 in the preceding year.

39.—Excise and Opium.

General.

263. The year 1915-16 was marked by a further decrease in the consumption both of country spirit and opium. This was mainly a consequence of the increase in prices arising from the enhanced taxation of those intoxicants, but was also partly due to the continuance of the war and the prevalence of high prices generally, coupled with the partial failure of the autumn crops and the poor spring harvest prospects. The year was also signalized by a general enhancement of excise taxation. The still-head duty on country spirits and the issue price of excise opium were raised at the commencement of the year and the import duty on foreign spirits (including the Punjab products so classed) was raised towards its close. There was a large fall in the receipts from country spirit, vend fees (which declined by over 3 lakhs) and the malt liquor duty. The position was to some extent retrieved by the opium sale receipts. The financial result of the year's working was that the total revenue of the department increased by Rs. 87,787 to Rs. 70,08,878.

264. The enhancement of the still-head duty on country liquor from Rs. 5 to Rs. 6-4-0 per gallon resulted in an increase of over 2 lakhs under this head, and the raising of the issue price per seer of excise opium from Rs. 20 to Rs. 25 accounted for a rise of 3 lakhs in the receipts under the head of opium.

265. Though the Excise revenue is increasing, and has in fact, mainly owing to enhanced taxation, practically doubled in the last 10 years, the number of retail opium and country spirits shops has, in the same period, been reduced by 30 per cent. and the consumption of country spirit has fallen by no less than 24 per cent.

Liquor.

266. A decrease of 13 per cent. in the consumption of country liquor during the year, though largely due to the rise in retail prices, the departure of troops and general high prices is, in a great measure, the results of the efforts of the administration to assist the cause of temperance reform. The number of retail licenses for the sale of country spirit was further reduced during the year to 720 and stood at one for every 27,150 of the population, against one for every 15,525 persons ten years ago. Licenses at fairs were greatly restricted, and in Amritsar all liquor shops were removed from the interior of the city to Municipal premises in the outskirts.

267. Valuable suggestions were received from local and municipal bodies which co-operated most usefully with Collectors as advisors on questions of excise policy. Private societies extended their aid and temperance teaching was vigorously promoted in many of the Schools and Colleges of the Province. Evidence of the good work done in this direction is found in the further decrease in the number of convictions for drunkenness by 170 to 961.

Opium.

268. The trivial extent of the decrease (by 2,000 seers, or less than 4 per cent.) in the recorded consumption of excise opium, in spite of an advance of 10 per cent. in the retail price, proved the opium habit to be much less affected than the drink habit by considerations of price.

269. The restriction of the import of hill opium into Nabha and its total prohibition in the case of Jind and Maler Kotla resulted in a shrinkage of the amount supplied to Native States by 51 per cent. A proposal to close down all supplies of this kind of opium to British districts and Native States alike came under consideration of Government. Such a measure could put a stop to cultivation of this drug in the Province and would deal a severe blow at the large illicit traffic in opium which is believed to exist between certain Native States and Calcutta.

REVENUE AND FINANCE.

Charas.

270. There was a negligible increase in the consumption of *charas*. An increase of over 13,000 sers in the consumption of *bhang* was partly explained by the unusual heat of the summer of 1915 and the consequently abnormal demand for this cooling drink.

Cocaine.

271. There was no expansion in the traffic in cocaine, probably as a result of the war and diminished supplies.

Excise offences and preventive measures.

272. There was a slight improvement in the proportion of persons convicted to persons arrested for excise offences. The latter increased in number from 1,023 to 1,080. Exceptional efforts were made to cope with illicit distillation, and the detection of 223 cases in the campaign mentioned in last year's report amply justified the special measures adopted.

40.—Salt Revenue.

CIS-INDUS AND KALABAGH MINES.

273. The quantity of salt excavated during the year was 4,035,890 maunds, or 4·88 per cent. more than in 1914-15. 3,981,289 maunds or 0·46 per cent. more than last year were issued, and the sales amounted to over 40 lakhs of maunds, a decrease of 4·84 per cent.

274. The price, 1 anna 6 pies a maund, remained unchanged during the year under report. There was a net profit of Rs. 38,190 as compared with a profit of Rs. 9,541 in 1914-15.

275. The through traffic sales which amounted to over 35¼ *lakhs* declined by 197,037 maunds or 5·28 per cent. and formed 94·04 per cent. of the total rail-borne trade of the division as compared with 94·43 per cent. in 1914-15.

MANDI MINES.

276. The sales from the Mandi Mines, 103,771 maunds, were more by 26,716 maunds or 34·67 per cent. than the sales of the previous year.

SULTANPUR SALT WORKS.

277. The sales of Sultanpur salt increased by 10,818 maunds to 37,854 maunds. The price at which salt was sold by the manufacturers at the Sultanpur Salt Works ranged from 4 annas to 9 annas a maund, the average price being 6 annas 6 pies a maund as compared with 5 annas a maund in the preceding year.

INTERNAL BRANCH.

278. Fees from licenses for the manufacture of saline substances realised Rs. 4,198 as compared with Rs. 4,846 in 1914-15.

GENERAL.

279. Excluding the operations of the Internal Branch, complete provincial figures of which are not published, the accounts for the Punjab, including excise duty, are as follows :—

Source.	*Receipts.*	*Charges.*	*Net receipts.*
	Rs.	Rs.	Rs
Cis-Indus	45,63,103	5,00,982	40,62,121
Mandi	13,266	5,032	8,234
Sultanpur	38,783	10,023	28,760

41.—Stamp Revenue.

280. Receipts under the Stamp and Court Fees Acts contributed Rs. 58,19,745 to the State revenues, a sum exceeding the income of the previous year by Rs. 3,77,857 and that of 1913-14 by Rs. 1,90,521. Receipts under judicial or court fee stamps accounted for more than two-thirds of the whole increase. This was variously explained as due to increased litigation, the institution of civil suits of high values, and the good spring harvest of 1915 which led creditors to realise their debts by legal process. The fact that 24 out of 28 districts reported increases in revenue of this kind is, no doubt, indicative of a tendency of affairs to revert to pre-war

conditions. In the case of receipts from the sale of non-judicial stamps also this tendency, though less marked, was definite. These rose to Rs. 19,68,957 in 1915-16 after a fall of nearly a lakh and-a-half attributed to the dislocation of business caused by the war in the previous year.

281. The expenditure of the Department rose from Rs. 2,21,498 in 1914-15 to Rs. 2,40,823 in the year under report.

42.—Income Tax.

General.

282. In budgetting for this year, 1915-16, the circumstances of the time appeared to justify provision for a fall in collections of income tax. What actually happened was an increase by 3½ per cent. from 17·48 lakhs to 18·12 lakhs of rupees, a very satisfactory result in view of the fact that assessments were based on the profits of the year in which war began. Many trades reaped large profits from the outbreak of the war. Those who held stocks of articles commonly imported from hostile countries profited exceedingly. Dealings in grain were generally brisk and money was made on the rise in prices. On the whole, the mercantile classes in the Punjab did not appear to suffer from the war.

Profits of companies.

283. Profits of companies are an almost negligible feature in the Punjab. Out of Rs. 96,000 the Southern Punjab Railway accounts for Rs. 73,000, and a decrease of Rs. 14,500 in their assessment explains the greater part of the decrease of Rs. 22,500 under this head.

284. The amount returned as paid on account of interest of securities of companies is now Rs. 2,045. Only five companies were reported to be issuing debentures.

Part IV.

285. The collections in respect of the year's assessment under Part IV (other sources) rose from 1,227 to 1,322 thousands of rupees, an increase of 8 per cent. Part of this increase is due to the trading classes on the whole having profited from the war and part to the increased care which is being paid to assessment. It is satisfactory to note that the percentage of collections under Part IV due to the lowest class (incomes under Rs. 1,250) fell to 16.

Group assessment.

286. The group system of assessment was tried in fifteen districts, but the results were not very encouraging. In Siálkot, its original home, it was abandoned as unworkable. It was, however, determined to persevere with the system, as existing methods of assessment left so much to be desired, and any expedient offering a promise of even local success in sympathetic hands deserved a full trial.

287. The special assessment of Jullundur City and Cantonments was carried out during the year and resulted in an increase of over Rs. 16,000. A special staff, consisting of an Extra Assistant Commissioner and three Naib Tahsildars and establishment, was sanctioned for the revision of the assessment in the towns of Lahore Division, Ferozepore and Ludhiána. The result had not been communicated to Government by the close of the year

43.—Fore st Revenue.

288. The following figures show the revenue and expenditure of the Forest Department under major heads for the year ending June 30th, 1916 :—

Revenue.	Rs.
Timber cut from forests by Government agency ...	4·06 lakhs.
Timber removed by purchasers and consumers ...	11·46 ,,
Drift and waste wood	0·39 ,,
Revenue from forests not managed by Government	0·03 ,,
Other heads	1·24 ,,
Total ...	17·18 lakhs.

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Expenditure.		Rs.
Conservancy and works	... ...	4·40 lakhs.
Establishment ...	... ...	4·83 "
Total	...	9·23 lakhs.

289. The income and expenditure exceeded the amounts for the preceding year by Rs. 2 52 lakhs and Rs. 0·21 lakhs, respectively. The increase in revenue was chiefly due to a larger outturn of timber and higher prices. There was also an expansion of the resin industry and a favourable market for its products.

290. The year's working resulted in a net surplus of Rs. 10·56 lakhs, made up as follows :—

		Rs.
Cash surplus	...	7·95 lakhs.
Increase in value of stock ...	...	1·07 "
Increase of outstanding revenue	...	0·10 "
Capital expenditure less interest	...	1·44 "
Total	...	10·56 "

44.—Provincial Revenue and Expenditure.

General.

291. The provincial shares of the revenue raised and the expenditure incurred in the Punjab during the last two years, with the opening and closing balances in each year, are shown in the table below :—

	1914-15.	1915-16.
	Rs. (thousands).	Rs. (thousands).
Opening balance	*70,92	52,21
Income	4,35,93	4,40,87
Net transfers from Imperial to Provincial.	40,13	47,65
Total ...	5,46,98	5,40,73
Expenditure	4,94,77	4,77,18
Closing balance ...	52,21	63,55

*Excludes 1 crore surrendered to the Government of India from 1st November 1914.

Income.

292. There was a falling off of about Rs. 2,39,000 in the provincial share of the receipts from Land Revenue owing to heavy suspensions of the *kharif* instalment.

Receipts under Stamps and Excise increased by Rs. 1,87,000 and Rs. 69,000, respectively. Forests brought in a larger income by nearly 3 *lakhs*, partly owing to arrear fellings in certain areas and partly to larger receipts from the Resin Division. Agricultural receipts went up by nearly half a *lakh*. Public Works receipts decreased by about Rs. 40,000. The provincial revenue in the aggregate, excluding that from assignments, increased by nearly 5 *lakhs*.

Assignments.

293. The main reason for the increase of 7½ *lakhs* in the net assignments from Imperial to Provincial revenues is that Rs. 11,27,000 were received in 1915-16, bringing the net provincial revenue from Irrigation to Rs. 41 *lakhs* against nothing in the previous year. An assignment of Rs. 31,000 was given from Provincial to Imperial revenues on account of the change in the classification of the charges for treasure guards employed in the Public Works Department.

Expenditure

294. Charges under the Land Revenue head decreased by Rs. 40,000 Expenditure under Forests increased by Rs. 35,000, chiefly owing to more extensive fellings and to larger expenditure on the demarcation and extension of forests. Charges for Courts of Law increased by Rs. 1,41,000

owing principally to the special tribunals which sat during the winter of 1915-16 and to larger sums being disbursed to witnesses for road money, etc. Jail expenditure also rose to the extent of over Rs. 2 *lakhs* owing to an appreciable increase in the jail population coupled with the dearness of food-stuffs which raised the dietary charges. The increase of about $1\frac{3}{4}$ lakhs under Police was due to the entertainment of a large temporary force to cope with the increase in crime. Educational charges also increased by nearly Rs. 2 *lakhs* owing to larger grants-in-aid to schools. Expenditure under a number of heads was also swollen by the necessity of providing grain compensation allowance during the whole year owing to the continued high price of cereals, and the total amount thus expended was more than double the three lakhs incurred for this purpose in 1914-15.

A sum of Rs. 1,58,000 was debited to provincial revenues under Famine Relief in consequence of the amount paid to railways for the concessions for carriage of fodder. The expenditure on Irrigation—Major Works—also increased by some Rs. $8\frac{1}{2}$ *lakhs* owing to unexpected outlay on urgent works for the proper maintenance of the canals. These increases were more than counterbalanced by a reduced expenditure of Rs. $8\frac{1}{2}$ *lakhs* under Medical, due to a considerable reduction in the grants made to local bodies for expenditure on sanitary schemes and to some extent to savings in establishment charges on account of officers being deputed to military duty, and of Rs. 26 *lakhs* under 45—Civil Works owing mainly to the operation of the orders of the Secretary of State restricting expenditure generally. The aggregate provincial expenditure showed a decrease of a little over Rs. $17\frac{1}{2}$ *lakhs*.

45.—Local Funds.

295. The gross income of the district boards, Rs. $74\frac{1}{2}$ *lakhs*, fell by Rs. $7\frac{1}{2}$ *lakhs*, owing almost entirely to the curtailment of Government grants for roads, which were less by nearly Rs 9 *lakhs*. At the same time the income was more than double the average, Rs. 39 *lakhs*, of the period 1902-03—1905-06. The total of Government grants was nearly Rs. 25 *lakhs* as against Rs. $32\frac{1}{2}$ *lakhs* in the previous year and other contributions also fell off by nearly Rs. 80,000. Losses in receipts under some of the various heads were more than balanced by gains under others including local rate, the result being a net increase of under $1\frac{1}{4}$ *lakhs*. On the other hand expenditure rose by about Rs. $11\frac{1}{2}$ *lakhs* to over Rs. $86\frac{1}{4}$ *lakhs*, the increase being general under nearly every head.

296. Receipts under education rose by over Rs. 1 *lakh* mainly owing to the larger Government grants. There was, however, also some increase in the amount of fees realised in secondary schools, the income so realised amounting to 13 per cent. of the total expenditure excluding expenditure on buildings. The gross expenditure, excluding expenditure on buildings, rose by over Rs. $2\frac{1}{4}$ *lakhs* to over Rs. 23 *lakhs*. Income under the head "Medical" was nearly Rs. 9,000 better than last year, owing to increased Government contributions. "Other contributions" were less by nearly Rs 9,000, but this was due to the failure to obtain the credit of certain contributions due from municipalities in the Rohtak District before the end of the year. Income from fees and from sale of medicines remained stationary at about 10 per cent. of the total income, and represented but a very insignificant fraction of the expenditure which increased by about Rs. 8,000 to nearly Rs. 8 *lakhs*. The Karnal board justifiably spent both actually and relatively more than any board on Medical relief, *viz.*, 17 per cent. of its total expenditure.

297. There was a falling off of nearly Rs. 10 *lakhs* in receipts under the head "Civil Works," chiefly owing to the curtailment of Government grants, which accounted for over Rs. $8\frac{1}{2}$ *lakhs* of the decrease. Expenditure, notwithstanding, rose by about Rs. 11 *lakhs* and this was possibly owing to the generous scale of the grants distributed at the close of

the previous year and to the large balances accumulated in many cases. About Rs. 23½ *lakhs* were spent on communications and Rs. 11¼ *lakhs* on buildings. Establishment charges and contingencies amounted to only 3·07 per cent. of the cost of the works executed.

298. No board allowed its balance to fall below the minimum; but in a number of cases the year closed with dangerously low balances and one board was forced to overdraw in order to mee establishment and other recurring charges payable in the early months of the current financial year.

46.—Municipal Funds.

299. The total income of municipalities (Rs. 74,35,062) was more than Rs. 8¾ *lakhs* less than in the previous year. Octroi receipts rose by more than Rs. 3 *lakhs*, sale of water by Rs. 59,000, sale of land and produce of land by Rs. 39,000, and other various heads, including an item of Rs. 1,22,765 withdrawn from deposit with a bank by a committee, by about Rs. 2½ *lakhs*. These increases were, however, much more than counterbalanced by a falling-off of about Rs. 15 *lakhs* in the amount of loans and grants from Government and decreases of about another *lakh* under various other heads.

300. The fall in income was accompanied by a corresponding decrease in expenditure, which amounted to Rs. 74,93,721 as against Rs. 83,67,181. In 1914-15, however, the apparent expenditure was swollen by the deposit of about Rs. 10 *lakhs*, including the Government grant of Rs. 9 *lakhs* for the Lahore sewage scheme, in saving banks: but, apart from this, expenditure in the year under review was considerably less under a number of heads. The chief decreases were under the heads "Public Works (roads and buildings)" Rs. 1,32,226, "Other Miscellaneous Charges" Rs. 1,21,776, "Water-supply" Rs. 97,691, "Unforeseen Charges," Rs. 22,893, "Permanent Advances" Rs. 33,466, "Police" Rs. 12,000, and "Conservancy" Rs. 44,000. The decrease under the last head was, however, only nominal as there was an expenditure of Rs. 56,279 under the new head "Health Officers and Sanitary Inspectors," which was formerly not distinguished. Other large increases were "Contributions to the Electricity Department" Rs. 3 *lakhs*, due to the opening of the Amritsar works, "Deposits" Rs. 62,526, "Public Instruction" Rs. 88,776, "Hospitals and Dispensaries" Rs. 41,668, "Drainage" Rs. 52,937, "Repayment of loans" Rs. 25,853, "Lighting" Rs. 23,000, "Plague" Rs. 15,530 and "Markets and slaughter-house" Rs. 11,400. Expenditure on public instruction amounted to Rs. 7,72,450 or about 10·3 per cent. of the total, but of this 21 per cent. was met by the income from fees and 21 per cent. from Government grants. "Hospitals and Dispensaries" accounted for rather over 9 per cent. of the total expenditure, and practically the whole of this fell on the general funds of the committees, less than 4 per cent. being recovered in fees. Expenditure on Public Works was considerably less than in the previous year, and the percentage of establishment charges on the cost of works executed was consequently higher.

301. Four municipalities and seven notified areas failed to close the year with the prescribed minimum balance. The closing balance of 13 municipalities and of 25 notified areas was in excess of their expenditure during the year. Government loans amounted to only about Rs. 2½ *lakhs* as compared with nearly Rs. 9 *lakhs* in the previous year. The loans were all granted in connection with water supply schemes, the largest being Rs. 1 *lakh* received by Rewari. Government grants amounted to Rs 5,95,074, of which Rs. 1,91,560 were for educational and medical purposes and Rs. 4,03,514 for general purposes. Under the last head are included grants distributed by the Sanitary Board, of which the principal amounts were Rs. 1,15,617 to Dera Ghazi Khan, Rs. 70,000 to Rewari, Rs. 50,000 to Sialkot for water-supply schemes, and Rs. 42,360 to Rawalpindi and Rs. 8,723 to Gurdaspur for intra-mural drainage schemes.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Births and Deaths—

Sanitation—Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board for the year 1915.

Medical Relief—
- Notes on the Annual Statements of the Dispensaries and Charitable Institutions of the Punjab for the year 1915.
- Report of the Pasteur Institute, Kasauli, for the year 1915.
- Report on the working of the Punjab Lunatic Asylum for the year 1915.

Vaccination.—Notes on vaccination in the Punjab for the year 1915-16.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical Abstract for British India, Volume III—Public Health.

47. Details of Census.

[*Vide* pages 157-67 of the Administration Report for the year 1913-14.]

48.—Births and Deaths.

302. Based on an estimate of population arrived at by the method described in the report for 1914 the birth and death rates for the year under report work out at 41 and 34·1 per thousand. These figures fall short of the rates calculated on the census figures by 2·6 and 2·2 *per mille*, respectively. The population in all the districts of the Province except Simla has increased since 1911, and the provincial total at the close of the year was 20,573,733, a rise of 6 per cent. over the census returns for that year.

303. But for plague, which was responsible for a death-rate of 11·48 per thousand, the year 1915 would have been an exceptionally healthy one, and, excluding deaths from this disease, the death-rate was lower than it had ever been since 1877. With the exception of plague, cholera, and respiratory diseases, none of the classified ailments caused an increased death-rate while the statistics indicated a most satisfactory reduction of deaths from fever compared with the figures for the two previous years, due, no doubt, to the abnormally dry weather in the latter half of the year. The birth-rate, though less satisfactory, compared favourably with the average for the previous five years, and was only slightly lower than in 1911-12 and 1913. The birth-rate in 1914 was exceptional, and a much larger decrease was to be expected than actually occurred.

304. The number of children born during the year was 843,012, of whom 440,955 were males, and 402,057 females, the resulting rates being 43·6, 22·8 and 20·8 *per mille* of the census population. Compared with the previous year there was an all-round decrease of 2·7 *per mille*, Births.

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but compared with the last quinquennial average the rate was only 1·3 in defect. The rate for 1915 was presumably affected by plague, and perhaps partly by the absence of young men and those in the prime of life at the war. In Rohtak and Gurgaon, however, the rates were over 50 *per mille*, an excess of 26 *per mille* over the death-rates. As the former is one of the best recruiting districts in the Province, much stress cannot be laid on the second of the reasons suggested. For the whole Province the excess of births over deaths amounted to 7·3 *per mille* of the population.

Deaths.

305. During the year under report 702,550 deaths (359,821 males and 342,729 females) were recorded, as against 618,073 in the previous year, giving a rate of 36·3 *per mille*. The increase of 4·3 was chiefly due to plague, but cholera and respiratory diseases were contributory causes. With the exception of these diseases, dysentery and diarrhœa, the rates all round were lower than in 1914, while the death-rate from fever showed a most satisfactory reduction, and was, in fact, the second lowest recorded since 1877.

306. The death-rate was highest in the Rawalpindi District (57·4) and was above the provincial rate in eleven other districts. It was less than 20 *per mille* in the Dera Ghazi Khan and Simla Districts, and less than 30 in ten other districts. Generally the rates were highest in districts which suffered most severely from plague. Where there was no plague the death-rate was very low.

307. The general death rate in towns was practically the same as that in rural circles, but there were considerable differences in respect of the various causes of death, the rural rate for plague, for example, being 6·03 in excess of the urban rate. In the smaller towns of the Province the variations in the rates were very marked, ranging from 2·40 in Gojra to 68·96 in Gohana. Sixteen other towns had rates of over 50 *per mille*, the high mortality in most cases being due to plague. Of the three principal towns in the Province, Amritsar was the most unhealthy with a death-rate of 43·5 as compared with 33·59 in Lahore, and 33·14 in Multan. The chief cause of this difference is to be found in the high mortality from respiratory diseases which amounted to 14·44 in Amritsar, as compared with 4·97 in Lahore, and ·027 in Multan.

308. March, April and May were the most unhealthy months. Plague was then at its height and the death-rate varied from 4·53 to 6·04. The months from September to December, usually marked by an epidemic of malaria, were healthier than any other period of four months in the year.

Infant mortality.

309. The figures with regard to infant mortality exhibited a very marked improvement. Calculated on the number of births during the year, the mortality among male infants worked out at a rate of 188·02, and among female infants at 189·17, as compared with 208·98 and 211·38 respectively in 1914—figures which themselves were lower than those of the previous year.

310. Efforts made to rectify the statistics of deaths with regard to classes were not successful. The figures for "Other classes" in the districts of Muzaffargarh, Sialkot and Jhang, for instance, resulted in rates of 240. 311·11 and 416·67 respectively. There is little hope of real improvement in this direction until the population is re-classified at the next census.

Cholera.

311. The number of deaths registered as due to cholera was 13,196, the largest number in any year since 1903. Deaths were reported from every district in the Province, 69 towns and 1,678 villages being infected. The Ferozepore and Lahore Districts with 2,890 and 2,657 deaths respectively were the worst sufferers, while among towns the number of deaths was

highest in Kasur, Gohána, Amritsar, Lahore and Kunjah. As in 1903 the chief cause of the outbreak is to be found in the infection spread by pilgrims returning from the great Hardwar Kumb Fair, but a further centre of diffusion was the Ghariala Fair in the Kasur Tahsil, while in the Gujrat District the epidemic started from local causes in two villages, in one case being due to the eating of the flesh of a diseased ox, and in the other to the drinking of water from a polluted well in a graveyard. The experience of the year has thus still further emphasised the importance of conrolling the sanitary arrangements at all large fairs, and in this direction good work was accomplished. Special arrangements were made at the larger fairs under the supervision of the Additional Deputy Sanitary Commissioner, and during the year schemes for the supply of pure water to the fair areas at Gullu Shah and at Nurpur in the Rawalpindi District were approved and assisted by grants-in-aid from the Sanitary Board.

312. Only 1,694 deaths were due to small-pox, the lowest number recorded since registration of deaths was introduced. Eleven districts of the Province were practically free from the disease. An explanation of the happy condition of the Province in this respect was suggested in last year's report which attributed it to the diminution of the number of susceptible individuals, owing to the death or vaccination of those who were not protected, during the long continuance of the epidemic from 1911 to 1913. Small-pox.

313. The death-rate from fevers was, on the other hand, again very high, amounting to 14·73 *per mille*, though this figure represents an improvement on the previous year, which is accounted for by the almost entire absence of malaria in epidemic form. Fevers.

314. The epidemic of plague with which the Province was afflicted in 1915 was the worst since 1907, a total of 244,104 deaths being recorded. The epidemic had commenced in the latter portion of 1914, and the full effects were felt in the first half of 1915. There was, however, but little recrudescence in the latter half of the year owing to the abnormally hot weather, and the efforts of the plague staff in treating the worst infected areas. The Jullundur Lahore and Rawalpindi Divisions suffered most, while the Multan Division escaped comparatively lightly. Despite the severity of the epidemic the special staff were able to afford general medical relief to a large number of persons, thus gaining the confidence of the people and facilitating the effective control of plague. The attitude of the people generally towards plague measures was found, on the whole, to be improving, and it is gratifying to note that some local bodies entertained paid agents to assist in the work, and that much valuable voluntary help was forthcoming. Plague.

49.—Emigration and Immigration.

There is nothing to report under this head.

50.—Medical Relief.

315. No department has been more affected by the war than the Medical Department. Owing to the reversion to military duty of a large proportion of the officers of the Indian Medical Service, Civil Assistant Surgeons held, at the end of the year, fourteen Civil Surgeoncies in excess of the number reserved for them; while 120 Civil Sub-Assistant Surgeons had been surrendered for service under the Army Department. Some 20 Assistant Surgeons applied for temporary commissions in response to the call to them for volunteers for active service. General.

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Institutions and patients.

316. There was a net increase of 6 in the number of dispensaries, 17 having been opened and 11 closed, making a total of 473 institutions. The inadequacy of existing arrangements for medical relief in certain districts engaged the close attention of the Inspector-General, but the financial stringency of the time hampered progress in this direction during the year under report.

317. There was a decrease by 91,565 in the total number of patients treated in general local fund hospitals and dispensaries and purely female institutions during the year, the number being 4,775,820 as against 4,867,385 during 1914. This decrease, which is among out-patients only, was apparent in every district in the Province, and was doubtless due to the entire absence of malaria in epidemic form in consequence of the abnormally dry summer. Of the total number treated, 89,910 were in-patients and 4,685,910 out-patients, the former showing an increase of 1,136 and the latter a decrease by 92,701 compared with the figures of the previous year. Of the total number of in-patients, 67,042 were cured, 13,616 relieved, 5,432 discharged otherwise, and 2,043 died. The ratio of deaths per cent. to the total number of patients treated was 2·27 as compared with 2·31 during 1914.

318. To the number of beds available 252 were added in the year, of which 57 were for females. Much, however, remained to be done in this direction, especially in the provision of wards for infectious and contagious diseases.

Statistics of diseases.

319. The diseases for which relief was most frequently sought at dispensaries are shewn in the following abstract :—

Cholera	1,458
Dysentery	61,875
Malaria	464,486
Rheumatic fever and rheumatism	88,696
Tubercle of the lung	4,658
Diseases of the nervous system	91,757
Diseases of the eye	989,436
All diseases of the respiratory system except, pneumonia and tubercle of the lung	280,208
Dyspepsia	192,757
Diarrhœa	52,443

Surgery.

320. Reference has already been made to the remarkable reduction in the number of patients treated for malaria. It amounted in fact to 210,549. On the other hand, there were large increases in the numbers of patients suffering from diseases of the eye, the respiratory and digestive systems, diseases of the skin and connective tissue, and ulcers, amounting in the aggregate to 182,301 cases.

321. The number of surgical operations performed during the year was 275,506, or 14,731 more than in 1914. The death-rate among patients operated on remained at last year's figure, namely, ·20 per cent. In 95 per cent. of the cases operated on for cataract, of which there were 13,474, the treatment was successful. Moga and Amritsar still head the list of places where most of these operations were performed. There were 2,308

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operations for stone in the bladder as against 2,115 in the previous year, Multan and Ferozepore districts showing the largest returns, with Dera Ghàzi Khan and Jhang following next in order.

322. Including a cash balance of Rs. 1,82,199, with which the year 1915 opened, the income of the Department from all sources amounted to Rs. 15,79,993. Of this sum, Government contributed Rs. 1,48,692 on account of salaries and otherwise, or about Rs. 65,000 less than in the preceding year. Contributions from local bodies, on the other hand, increased their contributions by nearly as much. Subscriptions received from Europeans and Indians amounted to Rs. 47,337 and Rs. 35,501, respectively, as compared with Rs. 58,825 and Rs. 33,448 in 1914. The expenditure rose from Rs. 13,66,404 in 1914 to Rs. 14,00,144 in 1915, and the year closed with a balance of Rs. 1,79,849. Income.

323. The new main block of the Mayo Hospital was completed during the year, and most of the equipment ordered in 1914 was received. The hospital as usual maintained its good record. The surgical work done shewed a large increase, while the percentage of mortality decreased by ·13 per cent., being ·87 per cent. against 1 per cent. in the previous year. The Mayo Hospital.

324. Besides the 50 beds reserved for them in the Mayo Hospital, there were set aside for the sick and wounded from overseas 80 beds in the Victoria Memorial Hospital at Jullundur and 50 beds in the King Edward Memorial Hospital, Karnal, the Local Government giving a special grant for the up-keep of these military wards. Much help, in the form of both cash and commodities, was received from the public of the districts concerned in doing all possible to ensure the comfort and welfare of the patients. Accommodation for wounded.

325. A new zenana hospital was opened at Hissar and a missionary dispensary for women at Montgomery, bringing the total number of female dispensaries up to 24. Attention was directed to the waste of power resulting in the co-existence of municipal and missionary female hospitals in certain localities and the necessity of discouraging such competition. The number of women employed in district and municipal hospitals during the year was 38, including 1 Assistant Surgeon and 19 Sub-Assistant Surgeons. The dearth of workers was still one of the chief obstacles to the spread of female medical aid. A very satisfactory movement was an undertaking by several local bodies to endow stipends for the training of female Sub-Assistant Surgeons, compounders and nurses, and it is hoped that this will help to ensure the steady supply of qualified women to take charge of female dispensaries.

326. The number of patients admitted to the Punjab Lunatic Asylum during the year, including re-admissions, was 311, the highest figure on record. Of these, 237 were males and 74 females. The number of re-admissions was 22. During the year electric lighting and fans were installed, extra accommodation was provided, and the congestion of the female asylum was relieved by the addition of four annexes. With the steady increase in the comforts and amenities of the Asylum, the demand for admission grows more frequent, and the daily average number of inmates during the year (763) was greater than ever before. The year on the whole was a healthy one. There were no epidemics, and both the death rate and the sick list were lower than in any year since 1910. The total cost of the Asylum was Rs. 1,70,788. To its income Rs. 13,109 were contributed by paying patients and Rs. 6,485 by the Asylum manufactories. Punjab Lunatic Asylum.

51.—Sanitation.

327. The Sanitary Board met three times during the year. Sanitary Board.

Grants by Government.

328. For the year under report, 8 lakhs were originally allotted to the Sanitary Board for distribution among local bodies, but it was subsequently found necessary to withdraw more than half this sum. Over $3\frac{1}{2}$ lakhs were, however, distributed by the board in aid of urban drainage and water-supply schemes and about Rs. 15,400 for rural sanitation before the financial stringency suspended its activities.

Urban sanitation.

329. The grant for urban schemes was 5 lakhs, of which Rs. 2,59,797 were expended on water-supply schemes for Dera Gházi Khan (Rs. 1,15,617), Rewári (Rs. 70,000), Siálkot (Rs. 50,000), Tandliánwála (Rs. 23,000), and Kálka (Rs. 1,180). Drainage schemes accounted for Rs. 94,249, the largest items being Rs. 42,360 for the Ráwalpindi intra-mural drainage project, and Rs. 21,045 for drainage at Kálka. Rupees 1,200 were spent on experiments and printing.

Rural sanitation.

330. Expenditure on rural sanitation, for which one lakh has been allotted, had reached Rs. 15,399 before the balance was withdrawn. Of this sum, Rs. 7,100 were spent on the Gujrat District scheme.

Miscellaneous.

331. Two lakhs out of the original grant of 8 lakhs were an additional allotment reserved for unforeseen schemes. The whole of this was eventually withdrawn. The Punjab Government accorded administrative sanction to the Gujránwála water-supply scheme estimated to cost Rs. 5,04,918 and a scheme for improvements in Amritsar City costing Rs. 1,63,650. The power delegated to the board last year to sanction sanitary schemes the cost of which does not exceed one lakh was exercised during the year in eight cases, estimates for which amounted in the aggregate to Rs. 2,65,183 and included one of Rs. 92,360 on an improvement to the Ráwalpindi drainage scheme. Technical sanction was received from the Public Works Department to eight estimates amounting altogether to Rs. 44,71,196.

Utilisation of refuse and sewage.

332. The sale of street sweepings realised Rs. 1,28,286, which was Rs. 12,234 less than the income from this source last year. Sewage irrigation was extended by 94 acres giving an additional income of Rs. 845. The area so irrigated in the year under report was 1,842 acres and the profit from it was Rs. 34,333.

Legislation and attitude of the public.

333. The offer of rewards by the Gurgaon District for sanitary improvement in villages evoked no response. On the other hand, works of public sanitary utility were constructed in eight districts by private individuals at a total cost of more than half a lakh. One of the main obstacles in the way of utilising the allotments for rural sanitation has been the rule that a grant-in-aid of a sanitary scheme shall only be made when half the cost of the work is provided from local sources. The subject of rural sanitation engaged the close attention of Government during the year and the question of passing a special Act on the lines of the United Provinces Village Sanitation Act was carefully examined. It was, however, decided that for the present such an Act was not required, and that the Punjab District Boards Act provided all the administrative machinery necessary. In several districts the adoption of simple regulations under this Act to promote the sanitation of villages was approved, and in a number of cases villages agreed to the imposition of taxation in order to meet the cost of elementary measures of conservancy. In such cases, where there is an evident desire on the part of the inhabitants for sanitary progress, it was decided to waive the strict requirements of the rule and to give grants in aid of sanitary works provided the principle of self-help was not disregarded, even when half the cost of such works would not be raised by local contributions. An experiment in the administration of quinine to school children, which was made in Amritsar in the autumn of 1914, met with considerable success. The results achieved were brought to the notice of selected municipalities which were recommended to adopt a similar scheme modified in the light of the experience gained at Amritsar.

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Fairs.

334. The prevalence of plague in the Jhelum District discouraged attendance at the Choa Saidan Shah and Katas Fairs in April. The number of people at both was not more than 4,000, as compared with an average attendance of nearly 35,000. The usual sanitary arrangements were supervised by the Additional Sanitary Commissioner. Only about 40,000 people attended the Pehowa Fair in Karnál District, which was spoilt by heavy rains. Special arrangements were made here to prevent infection from the wells, from which it is the custom of the people to draw sacred water. Thanks to the sanitary arrangements, not a single case of contagious or infectious disease resulted from the gathering at the "Baba Farid" Fair at Pákpattan in November. More than 60,000 pilgrims attended the "Nankana Sahib" Fair, the sanitary management of which was successfully undertaken by the Additional Deputy Sanitary Inspector.

52.—Vaccination.

Vaccination.

335. The number of vaccinations recorded in the year was 855,048 which was 2 per cent. more than the number in the previous year. In view of the extraordinary freedom of the country from small-pox, the increase from 165,378 to 185,812 in the number of re-vaccinations was remarkable. The number of primary vaccinations (669,236) was also very satisfactory, for though the actual number of such operations was less by 2,025 than in the previous year, the proportion of the children available vaccinated was greater and amounted to over 99 per cent. The district staff performed 634,527 out of the whole number of primary operations, the special staff, 28,733, cantonment vaccinators, 4,459, while 1,517 were done at dispensaries.

336. The percentage of successful re-vaccinations was 2·6 better than in the previous year, but there was a slight fall in the ratio of success obtained in primary operations, which was attributed to the effect on some of the lymph supplied of the excessive heat in certain districts.

337. There was a very considerable increase—from 8,489 to 15,049—in the number of vaccinations of infants under one year of age performed by the special staff. The disproportion between the number of males and number of females re-vaccinated continues to be pronounced, males accounting for nearly 69 per cent. of the total number of operations. It has, however, to be borne in mind that 55 per cent. of the population are males, so that the disproportion is not so great as it would appear at first sight.

338. The cost of the Department during the year was Rs. 1,40,964. The decrease of Rs. 5,983 as compared with the cost last year was due to the absence on military duty of the permanent Deputy Sanitary Commissioner.

339. The average cost of each successful vaccination was Re. 0-3-1, the decrease being due to the reason given in the paragraph above. If the proceeds (Rs. 19,607) from the sale of vaccine be deducted, the average cost falls to Re. 0-2-8 as compared with Re. 0-2-9 in the previous year.

340. There were 113,647 vaccinations in Native States which maintain their own establishment. Of these 84,645 were primary. The largest number were in Patiala, where 78,753 operations, of which 50,065 were primary, were performed during the year. The percentage of success in primary vaccinations varied between 95·83 in Jínd and 99·57 in Kapurthala, and in re-vaccinations between 33 in Farídkot and 75·47 in Baháwalpur.

Punjab Vaccine Institute, Lahore.

341. The total number of vaccinators employed in the Province was 274, and, of these, 63 attended the classes held during the year at the Vaccine Institute, Lahore, for instruction in the technique of vaccination and principles of elementary hygiene.

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The institute issued 33,894 tubes of lymph to Civil Surgeons throughout the Punjab, Native States in the Province, the North-West Frontier Province, Kashmír and a number of Military Medical Officers. In addition, it supplied 5,900 tubes to military authorities for use outside India.

CHAPTER VII.

INSTRUCTION.

Detailed information on the subjects dealt with in this chapter will be found in the report and statistical tables noted below :—

PROVINCIAL REPORT.

Education.—(1) Report on the Progress of Education during the year 1915-16.

(2) Report on the operations of the Department of Agriculture, Punjab, for the year ending 30th June 1916.

(3) Annual Report of the Punjab Veterinary College and of Civil Veterinary Department, Punjab, for the year 1915-16.

Arts and Sciences.—Report on the working of the Lahore Museum for the year 1915-16.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Education, Literature and Press.—Statistical abstract for British India, Volume I, Commercial Statistics.

53.—General system of Public Instruction.

[*Vide* pages 173-184 of the Administration Report for 1911-12.]

54.—Education.

GENERAL SUMMARY.

342. The year 1915-16 was one of development in all branches of education. The attendance in public institutions of all kinds increased by 16,204, or 1,268 more than in 1914-15, the rise in the number of middle school pupils being particularly noticeable. The total expenditure rose by nearly five *lakhs*, principally from district funds and private sources. At the same time, the effects of the war were felt in various ways. Thus the discontinuance of new recurring grants from imperial revenues and the uncertainty of the financial situation retarded the opening of primary schools by the district boards. A slackening of the rate of increase of pupils in primary schools resulted, and, in the Rawalpindi Division, where recruiting for the army was particularly brisk, there was even a decrease. Among the more favourable features of the year were the continued replacement of untrained by trained teachers and a marked advance in the number of girls attending schools. A manual training centre was started for the schools in Lahore City. A scheme of study recommended for Anglo-vernacular schools for girls, leading up to a school final examination, was drawn up by the Chief Inspectress in consultation with school authorities. Courses of lectures in hygiene, delivered by medical officers, were instituted in the various training institutions for teachers. An arrangement was made with the Young Men's Christian Association to secure the services of an expert to act as adviser to the Department in physical training. Six medical inspectors were appointed to visit secondary schools for boys and examine pupils. The number of recognised educational institutions rose by 285.

343. The total educational expenditure rose from Rs. 1,07,18,807 to Rs. 1,12,16,765. More than a third of this came from fees and private sources, less than a third from provincial revenues, and a quarter from district funds.

344. A change in the system of distributing grants to local bodies for the extension of vernacular education was introduced during the year. The variable grants formerly assessed on the basis of salary payments and other local expenditure were converted into fixed grants.

345. The total expenditure of the district boards on education rose by Rs. 3,47,949 to Rs. 27,87,274. The increase was distributed over all heads of expenditure. Deducting the portions which represent various imperial and provincial allotments, the expenditure of these bodies rose from Rs. 12,46,437 to Rs. 16,64,744, or by Rs. 4,18,307, while there was a decrease of Rs. 70,358 in the imperial and provincial share. The improvements carried out by the boards included the introduction of better scales of salaries in several districts.

346. The total expenditure of the municipal committees was Rs. 5,99,445, showing an increase of Rs. 73,673 on that of the previous year. Eliminating grants, their expenditure increased from Rs. 3,45,419 to Rs. 4,27,239. In the case of primary schools the increase was Rs. 31,749. The general tendency of these bodies is to postpone the needs of primary to those of secondary education.

347. Private enterprise continued to be manifested chiefly by religious bodies and in the field of secondary education.

Collegiate Education.

348. There was no increase in the number of Arts Colleges. The number of students in attendance rose by 379, the most noticeable increases being in the Khalsa College (105) and the Islamia College (91). These are satisfactory as indicating Sikh and Muhammadan progress in higher education. The expenditure on tuition rose by Rs. 95,663, of which provincial revenues contributed Rs. 77,226. Fee-receipts increased by Rs. 22,229, while income from private sources declined.

349. In the Government College, Lahore, the number of students increased by 33 to 584, of whom 320 were boarders. The new physics laboratory was nearly completed. The B.Sc. and M.Sc. classes in zoology and botany now constitute the University department of biology, and they are attended by students of other Colleges. Valuable research work was done by the science staff.

350. Grants amounting altogether to Rs. 21,850 were distributed by the University for building improvements, furniture, and science apparatus in five colleges; and library grants amounting to Rs. 6,000 were allotted to eight colleges.

Secondary Education (Boys).

351. The number of recognised schools increased by 25 to 404. Of the new institutions 5 were high schools, 13 Anglo-vernacular middle, and 7 vernacular middle. The number of pupils in secondary schools increased by 4,662.

352. Direct expenditure rose by Rs. 2,56,215. The increase in the case of high schools was chiefly under fees (Rs. 52,685) and provincial revenues (Rs. 43,745). In the case of Anglo-vernacular middle schools, fees, private sources, and district funds contributed most to the increase, while, in vernacular middle schools, almost the whole came from district funds. Of the total direct expenditure on secondary schools for boys, provincial revenues contribute 18 per cent. (chiefly on high schools), district funds 13 per cent. (chiefly on vernacular middle schools), municipal funds 7 per cent. (chiefly on high and middle English schools in about equal proportion), fees (chiefly in high schools) 51 per cent., the rest being met from private sources. Fees in English-teaching schools constitute 95 per cent. of the total fee-receipts. This, and the fact that the bulk of municipal and private educational expenditure is incurred on English-teaching schools, are illustrative of the growing demand for English instruction.

353. The number of teachers employed in secondary schools for Indian pupils, both boys and girls, increased during the year by about 400. Simultaneously with this general increase, the proportion of trained teachers is steadily rising.

354. In spite of the contraction of expenditure caused by the war there was a good deal of building activity.

355. Figures of recruitment which have been collected show that a considerable number of teachers and students in each division enlisted in the army: in the Rawalpindi Division alone, the number was 868 in the districts where an account was kept, in addition to 1,682 *ex*-pupils of primary schools.

PRIMARY SCHOOLS (BOYS).

356. The number of schools increased from 4,548 to 4,754. There were 102 more board schools, and 126 more aided schools; unaided schools declined by 23. Only 39 of the new board and aided schools were lower primary; it is noticeable that only 15 per cent. of the total number of primary schools for boys are of this grade, and that about 70 per cent. of the schools are maintained by Government or local bodies. Generally speaking, the people are not satisfied with anything less than an upper primary board school. The increase of pupils was 6,288, mostly in board schools.

357. The expenditure on the maintenance of primary schools for boys was Rs. 15,07,460 against Rs. 13,57,993 in 1914-15. The bulk of this increase was in district board expenditure: fee-receipts decreased by Rs. 2,482. Nearly four-fifths of the total expenditure are borne by district funds, and the greater part of the district funds available for the purpose consists of Government grants. Thus the financing of primary education is mainly from the centre, while the control of the schools is practically local.

358. The number of trained teachers employed continues to shew a satisfactory increase. In district board primary schools (including those for girls) they constitute two-thirds of the total. With the increase of trained teachers and the strengthening of the district inspecting staff, the quality of the teaching is considered to be steadily improving.

359. A large number of primary school buildings were erected or extended during the year, particularly in the Lyallpur District, where the number of such additions was 57.

TRAINING OF TEACHERS.

360. There were 1,271 men and 267 women students under training in various institutions, the increase on last year's figures being 116 and 57 respectively.

361. In the Central Training College the number of applicants for admission was the largest on record, and the Principal considers that the type of applicant is improving yearly. Two hundred and forty-six students received stipends from provincial revenues. The total expenditure was Rs. 1,02,260, against Rs. 1,00,604 in the previous year. The Central Training College is hampered by over-growth of numbers; and it is difficult to refuse applicants so long as there is an active demand for trained teachers in secondary schools.

362. Two Normal Schools were added during the year. Since the close of the year a 9th Government Normal School was opened at Gurdáspur, making the number of such institutions ten altogether, training some 700 teachers for primary schools.

363. The number of local classes for vernacular teachers of lower primary classes increased from 17 to 19. Four Anglo-vernacular training classes were opened in connection with high schools. Such classes are more or less temporary expedients, the continuance of which is conditional on the supply of teachers from permanent training institutions being inadequate.

364. The number on the rolls of the Lahore Normal School for Women was 101. The training of women students was also carried on in nine local training classes attached to secondary schools: these classes,

the number of which is being added to, contained 128 students. Of 230 Indian women students being trained for the teaching profession, 84 were Christians, against 78 Hindus, 49 Muhammadans, and 17 Sikhs: it would appear, therefore, that outside the small Indian Christian community there is comparatively little readiness to take up the teacher's calling.

PROFESSIONAL, TECHNICAL AND INDUSTRIAL EDUCATION.

365. The staff of the Law College, reorganised during the year, now consists of a principal, a law lecturer, and two part-time law readers. There were 159 students on the rolls. There were changes in the staff of the Medical College due to the recall of some professors to military duty, but satisfactory arrangements were made for carrying on their work. The new main college block was opened by the Viceroy in November 1915, and also the Veterinary College. The Agricultural College, Lyallpur, is attracting a better type of students. The new vernacular class was chiefly composed of agriculturists' sons.

366. In the Mayo School of Industrial Art, Lahore, the number of students increased to 261, of whom 150 were Muhammadans. The number of students in the photo-lithography section has doubled. The cotton-printing class has also made progress. The number of industrial schools increased by 2 to 30, with 2,769 pupils. The standing committee appointed to advise on industrial education recommended that schools in which forms of manual training are combined with elementary general education should no longer be separately classed as "industrial" schools, as the name causes a misunderstanding as to their function.

FEMALE EDUCATION (INDIAN).

367. Progress was well maintained in spite of adverse financial conditions. The number of institutions increased by 52 to 971 (9 high, 44 middle and 918 primary). The number of scholars rose by 4,371 to 49,367, the increase being nearly double last year's figure.

368. Nine out of 14 women candidates passed the University Intermediate examination, while 28 out of 41 were successful in the University examinations for titles or distinctions in Sanskrit, Hindi and Punjabi. The Chief Inspectress notes as regrettable the fact that most of the teaching in the secondary classes of large high schools, like the Kanya Mahavidyala and the Dev Samaj School, Ferozepore, is done by men. The vernaculars and needlework are usually well taught in the larger primary schools, and arithmetic is brought to a standard sufficient for household needs, but geography is a difficulty unless there is a trained teacher. Domestic economy is popular as a book subject but is seldom practical. Cooking, however, is practised in most secondary schools.

EDUCATION OF EUROPEANS.

369. The number of schools remained 36 as before, with 2,753 scholars on the rolls. The expenditure from all sources was Rs. 10,92,6[illegible]6, against Rs. 10,52,257 in the previous year. Imperial revenues contributed 15·6 per cent., provincial revenues 40·8 per cent., fees 30·6 per cent. and other sources 13 per cent. The number of teachers employed at the end of the year was 216, against 207 in 1914-15. The scale of pay has been considerably improved in recent years. Rs. 1,47,744 were spent from provincial revenues on the erection or improvement of school buildings. A signalling detachment of two masters, two staff sergeants, and fifteen boys volunteered for military service from Sanawar: most of them went to Mesopotamia. A second Sanawar detachment of one master and ten boys was sent to Siálkot for training. And ten of the students of the Sanawar Training Class for teachers, with the Master-in-charge, went on service to East Africa.

EDUCATION OF MUHAMMADANS.

370. In primary schools, the increase of Muhammadan pupils was comparatively small, and, in secondary schools, it compares unfavourably with that of Hindus. In Arts Colleges, the percentage of Muhammadan students rose from 21·3 to 21·6. There was practically no increase in the number of Muhammadans attending the Law and Medical Colleges, but their strength was more than doubled in the Agricultural College. The majority of students in the Veterinary College, the Mayo School of Art, and the various industrial schools, are Muhammadans. The total number of Muhammadan scholars in all public institutions for males was 142,187, compared with 155,252 in the case of Hindus and 46,824 in that of Sikhs. Muhammadan education is, as before, promoted by special scholarships, fee-concessions in backward district, special grants for the opening of schools in Muhammadan districts, liberal building grants for Muhammadan secondary schools, and such other means of encouragement as are feasible.

THE PUNJAB TEXT-BOOK COMMITTEE.

371. The work of the Text-Book Committee continued to expand, and the number of meetings increased. The Committee hold the copy-right of 179 publications. During the year under review the sum of Rs. 10,620 was spent on books and periodicals for presentation to schools. The Committee distributed to district officers 560 copies of its publication "Life, Light and Cleanliness" with a view to bringing the book and its teaching to the notice of lambardars and other village officials, and also took the opportunity of disseminating information about the war by presenting to educational institutions a number of books on this subject.

55.—Literature and the Press.

LITERATURE.

372. The total number of publications during the year has fallen from 2,221 to 1,721. This large drop of 500 is due partly to the rise in the price of paper and partly to the slackness of the printing presses, which need to be reminded of the duty of regularly supplying publications. Of the 1,721 works catalogued, 1,247 were original, 349 republications and 125 translations. Urdu with 624 again heads the list. Punjabi comes next with 571, followed as before by English. The decline is most noticeable in Urdu and Punjabi publications, but English and Hindi show a slight rise.

373. Poetry as usual claims the largest number of publications, and the volume of verse in Urdu and Punjabi is nearly as large as last year. The topics dealt with are of equal variety, but works of real merit are rare. Under Miscellaneous there is a large assortment of 452 publications on a variety of topics. The volume of religious literature is not as large as that of last year, but the subject is of popular interest and the list includes works of some merit. The controversial tendencies displayed in literature of this class have not died out, but there are signs of diminishing rancour and a calmer spirit of inquiry. In Biography lives of saints and sages and semi-divine heroes of old retain their hold on the popular imagination; the books are generally anecdotal and facts are seldom sifted from fiction. The Novel continues to be employed to expose social evils, but abler writers have begun to make use of it in connection with history. The number of historical publications—mostly for school books—has fallen considerably, but includes a few useful works. The books on Art and Travel continue to be of poor quality, and those on Science are mainly for schools and colleges.

374. All things considered, the literature of the year shows signs of advance, the most noticeable feature being that the educated classes have begun to take a larger share in its development.

THE PRESS.

Newspapers.

375. The number of newspapers and periodicals of all kinds published in the Punjab and the North-West Frontier Province during the year under report dropped from 275, the high water mark reached last year, to 271. The figures for 1915 include 46 papers which started during the year and 74 which ceased publication during the same period. There were thus at the close of the year considerably fewer papers in existence than at its opening.

376. The number of papers published in the North-West Frontier Province was three at the beginning and three at the end of the year. Three which started during the year existed for a brief time only.

377. Of the 271 newspapers and periodicals which appeared during the whole year 177 were in Urdu, 54 in English, 26 in Gurmukhi, 12 in Hindi, 1 in English and Roman Urdu, and 1 in Urdu-Hindi. The number of daily newspapers was 23, while weekly and monthly publications numbered 80 and 131, respectively. Other papers appeared at irregular intervals. Of the 23 daily papers 6 were in English and the remaining 17 in the vernacular, 6 of the latter representing the Hindu community, 4 the Muhammadan, 3 the Sikh and 4 being neutral.

378. More than half the newspapers and periodicals, 151 in fact, were published in Lahore. Amritsar comes next with 29, followed by Simla (15), Gurdáspur District (10), Jullundur and Siálkot (8 each), Ludhiána (7), Ráwalpindi, Ferozepore, Gujránwála and Gujrát Districts (5 each) and Montgomery (3). In the North-West Frontier Province 5 papers were published in Pesháwar and 1 in Dera Ismail Khan.

Circulation.

379. So far as can be ascertained, the circulation of the more important publications was approximately as follows :—

	Copies.
English.	
Bulletin (Hindu ; daily)	3,311
Tribune (Hindu ; daily)	2,357
Panjabee (Hindu ; daily)	1,132
Observer (Muhammadan ; bi-weekly) ...	870
Khalsa Advocate (Sikh ; weekly)	866
Vernacular.	
Zamindar (Muhammadan ; daily)	12,000
Hindustan (Hindu ; weekly)	10,000
Paisa Akhbar (Muhammadan ; weekly) ...	5,760
Loyal Gazette (Sikh ; weekly)	4,000
Bulletin (Hindu ; daily)	3,504
Zamindar (Muhammadan ; weekly) ...	3,011
Himala (Hindu ; weekly)	2,927
Parkash (Hindu ; weekly)	2,327
Akhbar-i-'Am (Hindu ; weekly)	2,000
Vakil (Muhammadan ; bi-weekly)	1,880
Arya Gazette (Hindu ; weekly)	1,830
Kashmiri Magazine (Muhammadan ; weekly) ...	1,793
Watan (Muhammadan ; weekly)	1,650
Paisa Akhbar (Muhammadan ; daily) ...	1,650
Al-Munir (Muhammadan ; weekly) ...	1,332
Rajput Gazette (Hindu ; weekly)	1,256
Ahl-i-Hadis (Muhammadan ; weekly) ...	1,088
Desh (Hindu ; daily)	1,075
Khalsa Akhbar (Sikh ; weekly)	1,000
Khalsa Samachar (Sikh ; weekly)	2,857

All these Vernacular papers are in Urdu except the last which is in Gurmukhi. The *Zamindar* stopped publication during the year.

380. There were 212 declarations under sections 4 and 5 of Act XXV of 1867 filed during the year. Security was demanded on 28 occasions, with the result that one existing press was closed and the opening of 7 new presses prevented, while three newspapers ceased publication and nine failed to make any appearance. In one case, that of the *Punjab National Steam Press*, Lahore, security deposited was forfeited, the action resulting in the closing down of the Press. Executive action.

The *Akhbar-i-'Am*, the *Nirbal Sewak*, the *Paigham-i-Sulah* and the *Zamindar* were prohibited, under the Defence of India Act, from publishing news and comments relating to the war other than those contained in Reuter's and the Secretary of State's telegrams. The last named paper was also warned at the instance of the Local Government for infringing the prohibition.

381. The following papers were formally warned for publishing articles open to objection on political grounds :—

Akhbar-i-'Am.	*Panjabee.*
Al-Fazal.	*Parkash.*
Az-zia.	*Prabhat.*
Bulletin (English).	*Sadiq-ul-Akhbar.*
Dipak.	*Shiv Shambu.*
Himala.	*Siraj-ul-Akhbar.*
Hindustan.	*Tribune,*
Intikhab-i-Lajawab.	*Vakil,*
Khuda.	*Watan.*

382. Warnings were administered to the papers mentioned below in connection with articles or advertisements objectionable on various grounds :—

Amrit.	*Arya Gazette.*
Arya Musafir.	*Hakam.*
Chandar.	*Hindustan.*
Dharmbir.	*Kashmiri Magazine.*
Himala.	*Khalsa Akhbar.*
Loyal Gazette	*Medical Doctor.*
Paisa Akhbar.	*Miftah-ul-Israr.*
Desh.	*Shanti.*
Al-Munir.	

383. Three papers, the *Desh Upkarak*, the *Dipak*, and the *Nirbal Sewak*, failed to comply with the provisions of section 3 of Act XXV of 1867, and were called to order.

384. Action under section 292 of the Indian Penal Code was taken against the *Zarif*, the *Dukh Niwaran*, the *Shahid*, the *Himala*, the *Hindustan*, the *Darwesh*, the *Vakil*, the *Desh Upkarak* (three times), the *Arya Musafir*, the *Ghalib*, the *Jhang Sial*, the *Al-Munir*, the *Rahnuma-i-Sehat* and *Talib* ; and against the *Brahman Steam Press*, the *Arya Steam Press*, and the *Punjab National Steam Press.* The cases against the *Dukh Niwaran* and the *Vakil* were withdrawn on an apology being tendered. The *Desh Upkarak* was acquitted each time ; Government has, however, appealed to the Chief Court against the third acquittal. There were convictions in all the cases except those of the *Desh Upkarak.* Prosecution.

56.—Literary Societies.

[*Vide* pages 196 and 197 of the Administration Report for the year 1911-12.]

57.—Arts and Sciences.

THE LAHORE MUSEUM.

385. The number of visitors during the year was 368,164 and the average daily attendance 1,043. There was a considerable fall from 6,279

to 5,224 in the number of female visitors on the "Zenana days." The usual course of lectures were delivered. These are becoming increasingly popular and attracted larger audiences than before.

386. The Museum acquired on loan, by purchase and by gift important additions to its collections. These included a valuable collection of Græco-Buddhist sculptures from Swat, a large number of antiquities collected by Sir Aurel Stein in Central Asia and Seistan, and several old paintings and rare Persian drawings. Three of the Museum galleries were closed to the public during the year, while new construction work and repairs were in progress.

387. The expenditure on the Museum was Rs. 11,173 as compared with Rs. 17,924 last year: Rs. 75 were realised by the sale of guide works and surplus coins.

CHAPTER VIII.

ARCHÆOLOGY.

Detailed information on the subject of this chapter will be found in the annual progress reports of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, Lahore, and of the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra, for the year ending 31st March 1916 ; also in the Administration Report of the Buildings and Roads Branch, Public Works Department, Punjab, for the year 1915-16.

58.—Archæology.

Hindu and Buddhist Monuments.

388. The expenditure of Rs. 19,712, more than twice the sum spent in 1914-15, on Hindu and Buddhist Monuments, met fully all the urgent claims for conservation during the year under report. Besides the usual annual repairs special conservation work was undertaken at the rock-cut temple, Masrur, the Baijnath temple, Manikyala Tope, and the Bhalar Tope. The repair of the last named was carried out and completed under the immediate direction of the Director-General of Archæology in India. Work at Manikyala was still in progress at the close of the period and a certain amount of underpinning as well as the clearance, levelling and draining of the surroundings of the monument remained to be done. Considerable progress was made in the excavation of the Masrur monument, practically the whole of the front being cleared to the base, and most of the original plan thus being laid bare. Its remote situation, however, and the difficulty of obtaining labour and supplies make the securing of the displaced masses of rock on the north-east a lengthy and expensive task. The special repairs to the Baijnath temple consisted principally in the removal of coats of lime plaster which concealed the original ornamentation and disfigured both the plinth and the spire. The result was reported to be very su ccessful.

389. Attention was directed to the conservation of the Kangra *fort.* Of the remains dating from before the occupation of the fort by Raja Sansar Chand in 1786 little remains, but the historical importance of the fort makes its site an object of peculiar interest.

390. Excavations at Taxila were continued by the Director-General of Archæology, and the archæological section of the Central Museum, Lahore, was enriched by the loan of a valuable collection of antiquities of all kinds recovered there.

391. The Honorary Numismatist to Government, Mr. R. B. Whitehead, I.C.S., reported on a find of gold coins made in the Hissar district. They numbered sixty and were part of a hoard of eighty-six coins of which twenty-six had found their way to the melting pot before the remainder were rescued. Twenty-three of the coins were of Samudragupta, the remainder of the later Kushans. The find was of special interest as Gupta coins are not usually discovered so far west.

Muhammadan and British Monuments.

392. During the year 1915-16 Rs. 22,736 were expended upon the conservation of Muhammadan and British monuments in the Punjab. Out of Rs. 12,642 spent upon maintenance and annual repairs, Rs. 10,424 were spent upon monuments.

393. Special repairs of a minor nature were also undertaken upon the Diwan-i-'Am in the Lahore fort. Some stone and marble fretwork missing from the Jharoka was replaced, a modern parapet at the rear removed, and the *chajja* secured. The raised earth in front of the

Diwan-i-'Am was also cleared to expose again the original *chabutra*. In the Bari Khwabgah some dilapidated verandah arches were dismantled and rebuilt; while additional works were carried on in the Roman Catholic chapel, such as the provision of terracotta lattice-work in the rear openings, and the restoration of the oriel windows in the front. Rs. 1,718 were spent on improving the road front of the Shalimar garden.

394. At Jahangir's tomb, Shahdara, the works in progress in the preceding year were completed, the total cost of the improvements amounting to Rs. 12,261. Petty repairs to the supposed grave of Qutb-ud-Din Aibak in the Anarkali bazar at Lahore were carried out from funds supplied by the owner, Bakhshi Tek Chand, of Lahore.

395. At Hissar, special repairs were executed upon the *Lat-ki-Masjid* and the town wall. Useful repairs to the interesting old gateways of the ruined Mughal Sarai at Gharaunda were carried out in the Karnal district. In the Muzaffargarh district structural repairs were completed upon the tomb and mosque of Tahar Khan Nahar at Sitpur. The work secured the interesting old enamelled tile decoration, which is a notable feature of these buildings.

396. At Kotli, in Sialkot district, the Maqbara of Abdul Nabi Bhati was put into repair.

CHAPTER IX.

MISCELLANEOUS.

59.—Ecclesiastical Jurisdiction.

(For this section reference should be made to pages 201—207 of the Report for 1911-12.)

60.—Ecclesiastical.

397. During the year several chaplains were deputed to military duty with the troops in France and in Mesopotamia. A grant-in-aid of Rs. 7,000 was paid by Government for the rebuilding of the Scottish church at Simla, and another of Rs. 1,320 for additions and alterations to the church of the same denomination at Murree. Sanction was conveyed to the purchase, at a cost of Rs. 649, of articles of service for the new Garrison church at Dalhousie and for the church re-built at Dharmsala in the place of the one destroyed by the earthquake of 1905. Improvements were made in the pay of establishments attached to the cemeteries at Khanewal and Gujranwala, at an annual cost of Rs. 150; and land for the improvement of the European cemetery at Sialkot was acquired at a cost of Rs. 872.

61.—Stationery.

398. The value of stationery issued to offices was Rs. 1,14,249 and to presses Rs. 1,57,146, making a total of Rs. 2,71,395 for the year 1915-16 against Rs. 2,61,110 in the preceding year, or an advance of 4 per cent. over previous year's expenditure, although the prices of paper and stationery articles in general were normal notwithstanding the war in Europe. The value of supplies to offices was less than the allotment by Rs. 8,656 and that to the presses was less than the allotment by Rs. 17,711 resulting in a total saving of Rs. 26,367 or about 9 per cent. in the aggregate over the allotments.

62.—Punjab Government Press.

399. The income of the Government Press decreased in the under report from Rs. 24,207 to Rs. 21,599, while the expenditure drop by Rs. 32,827 to Rs. 2,37,440. There was a slight rise in the value of work turned out. The sum paid for form work printed by contractor Government was Rs. 38,943 as against Rs. 38,450 in 1914-15.

The Press Establishment was reorganised, a revised Manua Rules was issued, and a complete stock-taking and valuation compl during the year.

LAHORE:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB
1272 CS—440—30-1-17.